

=> d his

(FILE 'HOME' ENTERED AT 10:51:11 ON 31 OCT 2005)

FILE 'REGISTRY' ENTERED AT 10:51:19 ON 31 OCT 2005

L1 STRUCTURE UPLOADED
L2 STRUCTURE UPLOADED
L3 STRUCTURE UPLOADED
L4 43 S L1 OR L2 OR L3
L5 1735 S L1 FULL

FILE 'CAPLUS' ENTERED AT 10:54:05 ON 31 OCT 2005

L6 333 S L5
L7 273 S L6 AND PY<2001

FILE 'REGISTRY' ENTERED AT 11:05:08 ON 31 OCT 2005

L8 13 S L2
L9 853 S L2 FULL

FILE 'CAPLUS' ENTERED AT 11:05:42 ON 31 OCT 2005

L10 198 S L9
L11 162 S L10 AND PY<2001

FILE 'REGISTRY' ENTERED AT 11:06:43 ON 31 OCT 2005

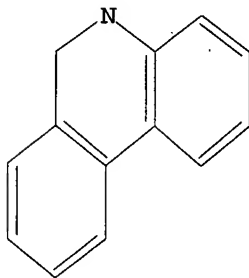
L12 50 S L3
L13 12732 S L12 FULL

FILE 'CAPLUS' ENTERED AT 11:07:30 ON 31 OCT 2005

L14 10561 S L13
L15 8562 S L14 AND PY<2001

=> d que l15 stat

L3 STR



Structure attributes must be viewed using STN Express query preparation.

L13 12732 SEA FILE=REGISTRY SSS FUL L3
L14 10561 SEA FILE=CAPLUS ABB=ON PLU=ON L13
L15 8562 SEA FILE=CAPLUS ABB=ON PLU=ON L14 AND PY<2001

=> s l15 and py<2000

19940462 PY<2000

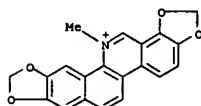
L16 8218 L15 AND PY<2000

=> d l16 1-100 bib abs hitstr

L16 ANSWER 1 OF 8218 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 2004:843257 CAPLUS
 DN 142:54869
 TI Increased secondary metabolites production by plant cell culture by addition of cyclodextrin to the culture medium
 IN Cho, Kyu Hun; Park, Se Choon
 PA S. Korea
 SO Repub. Korea, No pp. given
 CODEN: KRXXFC
 DT Patent
 LA Korean
 FAN.CMT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI KR 145770	B1	19980801	KR 1994-26350	19941014

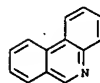
<--
 PRAI KR 1994-26350 19941014
 AB Productivity of a secondary metabolite from plant cell culture can be greatly increased by adding cyclodextrin to the culture medium. Sanguinarine, menthol, and anthraquinone are the secondary metabolites of which productivity were increased. Sanguinarine is produced by incubating California poppy on a culture medium such as Gamborgs B5, Durzan, or preferably Murashige-Skoog and by adding 2,4-D, Kinetin, 1-naphthalene acetic acid, alpha-, beta-, or gamma- cyclodextrin preferably 0.5-2.0% (w/v) beta cyclodextrin.
 IT 2447-54-3P
 RL: BMF (Bioindustrial manufacture); PUR (Purification or recovery); BIOL (Biological study); PREP (Preparation)
 (increased secondary metabolites production by plant cell culture by addition of cyclodextrin to culture medium)
 RN 2447-54-3 CAPLUS
 CN [1,3]Benzodioxolo[5,6-c]-1,3-dioxolo[4,5-i]phenanthridinium, 13-methyl- (9CI) (CA INDEX NAME)



L16 ANSWER 2 OF 8218 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 2004:678777 CAPLUS
 DN 141:102359
 TI Phenanthridinium hydrogenarsenate monohydrate
 AU Slouf, Miroslav; Cisarova, Ivana
 CS Department of Inorganic Chemistry, Faculty of Science, Charles University, Hlavova, 128 40, Czech Rep.
 SO Acta Crystallographica, Section C: Crystal Structure Communications (1999), C55(2), 1, IUCS900003
 CODEN: ACSCEE; ISSN: 0108-2701
 URL: http://journals.iucr.org/c/issues/1999/05/02/issconts.html
 PB Munksgaard International Publishers Ltd.
 DT Journal
 LA English
 AB Crystals of the title compound are triclinic, space group P.hivin.1, with a 7.242(7), b 10.010(7), c 10.962(6) Å, α 115.96(5), β 90.89(3), γ 107.84(7)°; Z = 2, dc = 1.697; R = 0.055, Rw(F2) = 0.148 for 2363 reflections. There is disorder in the phenanthridine middle ring.
 IT 733797-12-1, Phenanthridinium hydrogenarsenate monohydrate
 RL: PRP (Properties)
 (crystal structure of)
 RN 733797-12-1 CAPLUS
 CN Selenic acid, compd. with phenanthridine (1:1), monohydrate (9CI) (CA INDEX NAME)

CM 1
 CRN 7783-08-6
 CMF H2 O4 Se

CM 2
 CRN 229-87-8
 CMF C13 H9 N



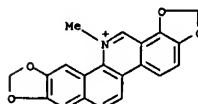
RE.CMT 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD

L16 ANSWER 2 OF 8218 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L16 ANSWER 3 OF 8218 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 2004:108442 CAPLUS
 DN 140:127266
 TI Preparation of sanguinarine and its derivatives by suspension culture
 IN Park, Duk-Hoon; Han, Ki-Tae; Sun, Jung-Hoon; Park, Lee-Keun; Park, Jong-Moon; Nam, Hong-Kil
 PA Pacific Co., Ltd., S. Korea
 SO Repub. Korea, No pp. given
 CODEN: KRXXFC
 DT Patent
 LA Korean
 FAN.CMT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI KR 140787	B1	19980615	KR 1995-12880	19950523

<--
 PRAI KR 1995-12880 19950523
 AB A process is provided for the production of sanguinarine and its derivs. which have antibiotic activities from plant suspension culture of Macleaya species. Tissues such as leaf, shoot, root, flower from plants of the genus Macleaya, especially Macleaya cordata and Macleaya microcarpa, are disinfected and sterilized. Then callus is induced by incubating the tissues on a media containing combinations of auxins such as 2,4-dichlorophenoxyacetic acid, naphthaleneacetic acid, and cytokinins such as kinetin, benzyl aminopurine. Induced callus is cultivated by serial passage culture to proliferate. Proliferated callus tissues are incubated by suspension culture, and culture cells is transferred to B5 medium containing 2 mg/l of NAA and alkaloids are accumulated by adding elicitor such as cell wall component of mold or Tobacco mosaic virus. Sanguinarine and derivs. thereof can be obtained from these cultures.
 IT 2447-54-3P, Sanguinarine
 RL: BMF (Bioindustrial manufacture); BIOL (Biological study); PREP (Preparation)
 (preparation of sanguinarine and its derivs. by suspension culture Macleaya Cells)
 RN 2447-54-3 CAPLUS
 CN [1,3]Benzodioxolo[5,6-c]-1,3-dioxolo[4,5-i]phenanthridinium, 13-methyl- (9CI) (CA INDEX NAME)

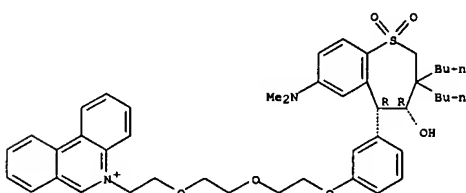


L16 ANSWER 4 OF 8218 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 2004:60147 CAPLUS
 DN 140:111291
 TI Preparation of substituted 5-aryl-benzothiepienes as ileal bile acid transport and taurocholate uptake inhibitors
 IN Lee, Len F.; Banerjee, Shyamal C.; Huang, Hsing Chih; Li, Jinglin J.; Miller, Raymond E.; Reitz, David B.; Tremont, Samuel J.
 PA G.D. Searle and Co., USA
 SO U.S. Pat. Appl. Publ., 235 pp., Cont.-in-part of U.S. Ser. No. 831,284.
 CODEN: USXXCO
 DT Patent
 LA English
 FAN.CNT 9

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 2004014803	A1	20040122	US 2002-68297	20020208
	US 6784201	B2	20040831		
	CA 2506703	AA	19970918	CA 1997-2506703	19970311
<--	EP 1440972	A1	20040728	EP 2004-10088	19970311
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, PT, IE,				
FI	AU 761249	B2	20030529	AU 2000-53394	20000816
	US 2002013476	A1	20020131	US 2001-828968	20010409
	US 6387924	B2	20020514		
	US 2003171426	A1	20030911	US 2002-76091	20020215
	US 6642268	B2	20031104		
	US 2004204478	A1	20041014	US 2004-830125	20040423
PRAI	US 1994-305526	B2	19940913		
	US 1995-517051	B1	19950621		
	US 1996-13119P	P	19960311		
	US 1997-816065	A2	19970311		
	US 1997-831284	A2	19970331		
	US 2001-828968	A3	20010409		
	AU 1997-23266	A3	19970311		
	CA 1997-2248586	A3	19970311		
	EP 1997-915976	A3	19970311		
	US 1997-40660P	P	19970311		
	US 1997-68170P	P	19971219		
	US 1998-109551	A2	19980702		
	US 1999-275463	A1	19990324		
	US 1999-443403	A1	19991119		
	US 2000-676466	A3	20000929		
	US 2002-68297	A3	20020208		
OS	MARPAT 140:111291				
GI					

L16 ANSWER 4 OF 8218 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)
 (Uses)
 as (hypolipemic agent; prepn. of substituted 5-aryl-benzothiepienes by cyclization of 2-((2-benzyl- and 2-benzoylphenylthio)methyl)alkanals
 as ileal bile acid transport and taurocholate uptake inhibitors)
 RN 197374-29-1 CAPLUS
 CN Phenanthridinium, 5-[2-[2-[3-[(4R,5R)-3,3-dibutyl-7-(dimethylamino)-2,3,4,5-tetrahydro-4-hydroxy-1,1-dioxido-1-benzothiepin-5-yl]phenoxy]ethoxy]ethoxy]ethyl]-, iodide, rel- (9CI) (CA INDEX NAME)

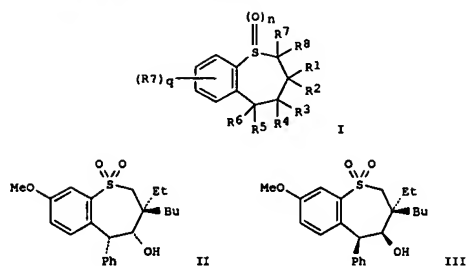
Relative stereochemistry.



• I-

RE.CNT 231 THERE ARE 231 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L16 ANSWER 4 OF 8218 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

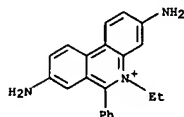


AB The title compds. (I) [wherein q = 1-4; n = 0-2; R1, R2 = H, (un)substituted (halo)alkyl, alkenyl, alkynyl, alkylaryl, arylalkyl, alkoxy(alkyl), dialkylamino, alkylthio, (polyalkyl)aryl, or cycloalkyl;
 or R1 and R2 taken together with the atoms to which they are attached = cycloalkyl; R3, R4 = H, alkyl, alkenyl, alkynyl, acyloxy, aryl, heterocyclyl, OR9, NR9R10, SR9, S(O)R9, SO2R9, or SO3R9; R9, R10 = H, (cyclo)alkyl, alkenyl, alkynyl, aryl(alkyl), acyl, heterocyclyl, or ammoniumalkyl; or R3 and R4 together = O, :NOR11, :S, :NOR11R12, :NR9,
 or :CR11R12; R11, R12 = H, (cyclo)alkyl, alkenyl, alkynyl, aryl(alkyl), heterocyclyl, carboxyalkyl, carboalkoxyalkyl, cyanoalkyl, OR9, NR9R10, SR9, S(O)R9, SO2R9, SO3R9, CO2R9, CN, halo, oxo, or CONR9R10; R5, R6 = H, alkyl, aryl, etc.; R7, R8 = H, alkyl; R9 = H, (un)substituted (cyclo)alkyl, alkenyl, alkynyl, polyalkyl, acyloxy, aryl(alkyl), halo(alkyl), (quaternary) heterocyclyl, (quaternary) heteroaryl, polyether, alkoxy, amino, alkylthio, NO2, carboxy, carbamido, etc.] were prepared for the prophylaxis and treatment of hyperlipidemic conditions, such as those associated with atherosclerosis or hypercholesterolemia.
 Thus, KOBu-t was added to a solution of 2-((2-benzyl-5-methoxyphenylsulfonyl)methyl)-2-ethylhexanal (preparation given) and dry THF cooled to -1.6°C to give, after workup, II and III (96% combined yield). The isomers were separated upon recrystn. II inhibited IBAT-mediated uptake of [14C]-taurocholate in H14 cells with an IC50 of 0.1 µM and reduced serum cholesterol from 143 mg (7%) to 126 mg (2%) compared to control in cholesterol-fed hamsters in a 14-day test. In vitro taurocholate uptake assay data are included for nearly 600 compds. of the invention.
 IT 197374-29-1P
 RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES

L16 ANSWER 5 OF 8218 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 2004:36734 CAPLUS
 DN 140:106406
 TI Processes, constructs and protein-nucleic acid conjugates for amplifying nucleic acids under isostatic conditions in vitro and in cells
 PA Enzo Diagnostics, Inc., USA
 SO Eur. Pat. Appl., 54 pp.
 CODEN: EPXXDW
 DT Patent
 LA English
 FAN.CNT 2

PI EP 1380643 A1 20040114 EP 2003-18714 19950113
 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
 IE CA 2425551 AA 19950714 CA 1995-2425551 19950112
 <-- EP 667393 A2 19950816 EP 1995-100438 19950113
 <-- EP 667393 A3 19951115
 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT,
 SE US 2005123926 A1 20050609 US 2003-713183 20031114
 US 2005123927 A1 20050609 US 2003-718391 20031119
 PRAI US 1994-182621 A 19940113
 EP 1995-100438 A3 19950113
 CA 1995-2140081 A3 19950112
 US 1998-302816 A1 19980303
 US 2003-260031 A1 20030606
 AB This invention provides inter alia an in vitro process for producing multiple specific nucleic acid copies in which the copies are produced under isostatic conditions, e.g., temperature, buffer and ionic strength, and independently of any requirement for introducing an intermediate structure for producing the copies. In other aspects, the invention provides in vitro processes for producing multiple specific nucleic acid copies in which the products are substantially free of any primer-coded sequences, such sequences having been substantially or all removed from the product to regenerate a primer binding site, thereby allowing new priming events to occur and multiple nucleic acid copies to be produced. This invention further provides a promoter-independent non-naturally occurring nucleic acid construct that produces a nucleic acid copy or copies without using or relying on any gene product that may be coded by the nucleic acid construct. In one example, strand displacement is achieved using ethidium-labeled oligonucleotides. Another aspect of this invention concerns a protein-nucleic acid construct in the form of a conjugate linked variously, e.g., covalent linkage, complementary nucleic acid base-pairing, nucleic acid binding proteins, or ligand receptor binding. In one aspect, an RNA polymerase is covalently attached to a transcribing cassette. Further disclosed in this invention is an in vivo process for producing a specific nucleic acid in which such a protein-nucleic acid construct conjugate is introduced into a cell. A still further aspect of the invention relates to a construct comprising a host promoter, second promoter and DNA sequence uniquely located on the construct. The host transcribes a sequence in the construct coding for a different RNA polymerase which after translation is capable of recognizing its cognate promoter and transcribing from a DNA sequence of interest in the construct with the cognate promoter oriented such that it does not promote

L16 ANSWER 5 OF 8218 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)
transcription from the construct of the different RNA polymerase.
IT 3546-21-2, Ethidium
RL: BIU (Biological use, unclassified); BIOL (Biological study); USES
(Uses)
(primers labeled with; processes, constructs and protein-nucleic acid
conjugates for amplifying nucleic acids under isostatic conditions in
vitro and in cells)
RN 3546-21-2 CAPLUS
CN Phenanthridinium, 3,8-diamino-5-ethyl-6-phenyl- (8CI, 9CI) (CA INDEX
NAME)



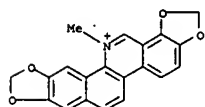
RE.CNT 11 THERE ARE 11 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L16 ANSWER 6 OF 8218 CAPLUS COPYRIGHT 2005 ACS on STN
AN 2003:874766 CAPLUS
DN 139:354473
TI Promoting whole body health with topical oral compositions containing
antimicrobials
IN Doyle, Matthew Joseph; Hunter-Rinderle, Stephen Joseph; Glandorf, William
Michael; White, Donald James
PA The Procter & Gamble Company, USA
SO U.S. Pat. Appl. Publ., 17 pp., Cont.-in-part of U.S. Ser. No. 39,620.
CODEN: USXXCO
DT Patent
LA English
FAN.CNT 8

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2003206874	A1	20031106	US 2003-454843	20030605
US 5939052	A	19990817	US 1996-754577	19961121
US 6350436	B1	20020226	US 1999-451420	19991130
US 6555094	B1	20030429	US 2000-710440	20001110
US 2002106336	A1	20020808	US 2001-39620	20011024
US 6667027	B2	20031223		
US 2003152527	A1	20030814	US 2003-351205	20030124
US 6821507	B2	20041123		
US 2005112070	A1	20050526	US 2004-975963	20041028
US 1996-754577	A2	19961121		
US 1998-203216	B2	19981130		
US 1999-451420	A3	19991130		
US 2000-607240	A2	20000630		
US 2000-710440	A2	20001110		
US 2001-39620	A2	20011024		
US 1999-165350P	P	19991112		
US 2003-351205	A3	20030124		

AB The present invention relates to promoting whole body health by using
topical oral compns. comprising an antimicrobial agent, in particular
stannous salts, such as stannous fluoride and stannous chloride in
combination with a polymeric mineral surface active agent such as
condensed polyphosphates or polyphosphonates. In addition to providing a
spectrum of intrasoral benefits, topical administration of the present
compns. to the oral cavity surprisingly provides benefits to systemic
health. In particular, the present invention relates to methods of using
the present topical oral compns. to reduce the risk in development of
cardiovascular disease, stroke, atherosclerosis, diabetes, severe
respiratory infections, premature births and low birth weight,
post-partum
dysfunction in neurol. and developmental functions, and associated
increased
risk of mortality. For example, a mouthwash composition contained
flavor 0.05,
FD&C Blue number 1 0.02, Na saccharin 0.06, glycerin 7.5, stannous
chloride
0.2, cetylpyridinium chloride 0.045, polyphosphonate 0.5, Na gluconate,
ethanol 14.46, and water balance to 100 %.
IT 2447-54-3, Sanguinarine
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(topical compns. for oral cavity containing stannous compds. and
polyphosphates and addnl. drugs for promoting whole body health)

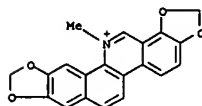
L16 ANSWER 6 OF 8218 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)
RN 2447-54-3 CAPLUS
CN [1,3]Benzodioxolo[5,6-c]-1,3-dioxolo[4,5-1]phenanthridinium, 13-methyl-
(9CI) (CA INDEX NAME)



L16 ANSWER 7 OF 8218 CAPLUS COPYRIGHT 2005 ACS on STN
AN 2003:854501 CAPLUS
DN 139:354525
TI Preparation of phosphorylated collagen type I
IN Gunasekaran, Subramanian
PA USA
SO U.S. Pat. Appl. Publ., 25 pp., Cont.-in-part of U.S. Ser. No. 677,646.
CODEN: USXXCO
DT Patent
LA English
FAN.CNT 2

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2003203008	A1	20031030	US 2003-406331	20030402
US 5814328	A	19980929	US 1997-782138	19970113
US 6127143	A	20001003	US 1998-162319	19980928
US 6548077	B1	20030415	US 2000-677646	20001003
US 1997-782138	A1	19970113		
US 1998-162319	A1	19980928		
US 2000-677646	A2	20001003		

AB The present invention relates to methods for preparing collagen,
especially type I
collagen. In particular, the present invention provides methods for the
preparation of collagen suitable for biomedical and veterinary
applications.
The collagen prepared according to the present invention provides
numerous
desirable characteristics for applications such as implantation,
transplantation, and grafting. A phosphorylated collagen type I
(collagen
PRO/p-collagen) was prepared by the steps including twice papain
treatment
process. A film was formed from the obtained collagen PRO, and in vivo
evaluated in skin transplants.
IT 2447-54-3, Sanguinarine
RL: BIU (Biological use, unclassified); COS (Cosmetic use); THU
(Therapeutic use); BIOL (Biological study); USES (Uses)
(preparation of phosphorylated collagen type I for biomedical compns.
containing
additives)
RN 2447-54-3 CAPLUS
CN [1,3]Benzodioxolo[5,6-c]-1,3-dioxolo[4,5-1]phenanthridinium, 13-methyl-
(9CI) (CA INDEX NAME)



L16 ANSWER 8 OF 8218 CAPLUS COPYRIGHT 2005 ACS ON STN
 AN 2003:829353 CAPLUS
 DN 139:317471
 TI Aryl and heteroaryl poly(ADP-ribose) polymerase (PARP) inhibitors,
 preparation, pharmaceutical compositions, and methods of therapeutic use
 IN Jackson, Paul F.; Li, Jia-Me; MacLin, Keith M.; Zhang, Jie
 FA Guilford Pharmaceuticals Inc., USA
 SO U.S., 37 pp., Cont.-in-part of U.S. Ser. No. 79,512, abandoned.
 CODEN: USXXAM
 DT Patent
 LA English
 FAN.CMT 17

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI US 6635642	B1	20031021	US 1998-145176	19980901
US 6346536	B1	20020212	US 1997-922548	19970903
CA 2294074	AA	19990311	CA 1998-2294074	19980902
<-- WO 9911649	A2	19990311	WO 1998-US18185	19980902

<-- W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GR, GM, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

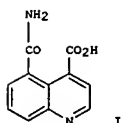
<-- AU 9893748 A1 19990322 AU 1998-93748 19980902

<-- EP 1012153 A1 20000628 EP 1998-946812 19980902

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI

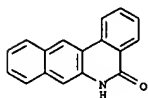
PRAI US 1997-922520 B2 19970903
 US 1997-922548 A2 19970903
 US 1998-79512 B2 19980515
 US 1998-145176 A 19980901
 WO 1998-US18185 W 19980902

GI

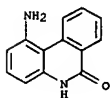


AB The invention discloses PARP inhibitors, pharmaceutical compns. comprising them, and methods of using them to treat tissue damage resulting from cell

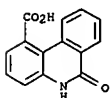
L16 ANSWER 8 OF 8218 CAPLUS COPYRIGHT 2005 ACS ON STN (Continued)



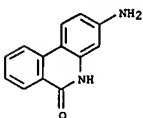
RN 17613-44-4 CAPLUS
 CN 6(5H)-Phenanthridinone, 1-amino- (8CI, 9CI) (CA INDEX NAME)



RN 17726-57-7 CAPLUS
 CN 1-Phenanthridinecarboxylic acid, 5,6-dihydro-6-oxo- (8CI, 9CI) (CA INDEX NAME)



RN 22860-48-6 CAPLUS
 CN 6(5H)-Phenanthridinone, 3-amino- (7CI, 8CI, 9CI) (CA INDEX NAME)



RN 23818-44-2 CAPLUS
 CN 6(5H)-Phenanthridinone, 4-amino- (8CI, 9CI) (CA INDEX NAME)

L16 ANSWER 8 OF 8218 CAPLUS COPYRIGHT 2005 ACS ON STN (Continued)
 damage or death due to necrosis or apoptosis, effect neuronal activities not mediated by NMDA toxicity; to treat neural tissue damage resulting from ischemia and reperfusion injury, neurol. disorders and neurodegenerative diseases; to prevent or treat vascular stroke; to treat or prevent cardiovascular disorders; to treat other conditions and/or disorders such as age-related macular degeneration, AIDS and other immune senescence diseases, arthritis, atherosclerosis, cachexia, cancer, degenerative diseases of skeletal muscle involving replicative senescence, diabetes, head trauma, immune senescence, inflammatory bowel disorders (such as colitis and Crohn's disease), muscular dystrophy, osteoarthritis, osteoporosis, chronic and/or acute pain (such as neuropathic pain), renal failure, retinal ischemia, septic shock (such as endotoxic shock), organ damage due to transplantation, and skin aging; to extend the lifespan and proliferative capacity of cells; to alter gene expression of senescent cells; or to radiosensitize hypoxic tumor cells. Prepn. of e.g. carboxamide PARP inhibitor I is described. The neuroprotective effect of 3,4-dihydro-5-[4-(1-piperidinyl)butoxy]-1(2H)-isoquinolinone is presented.

Effects of compds. of the invention on e.g. heart ischemia/reperfusion injury are also described.

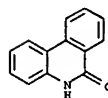
IT 1015-89-0, 6(5H)-Phenanthridinone 2178-32-7, Benzo[b]phenanthridin-5(6H)-one 17613-44-4 17726-57-7 22860-48-6 23818-44-2 27353-44-2 27353-48-6 46794-07-4 78256-30-1 97136-57-7 220998-74-3 220998-79-8

RU: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses) (aryl and heteroaryl PARP inhibitors, preparation, pharmaceutical

compns., and therapeutic use)

RN 1015-89-0 CAPLUS

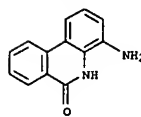
CN 6(5H)-Phenanthridinone (6CI, 7CI, 8CI, 9CI) (CA INDEX NAME)



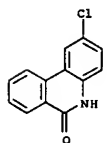
RN 2178-32-7 CAPLUS

CN Benzo[b]phenanthridin-5(6H)-one (7CI, 8CI, 9CI) (CA INDEX NAME)

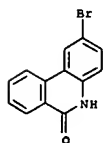
L16 ANSWER 8 OF 8218 CAPLUS COPYRIGHT 2005 ACS ON STN (Continued)



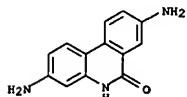
RN 27353-44-2 CAPLUS
 CN 6(5H)-Phenanthridinone, 2-chloro- (6CI, 8CI, 9CI) (CA INDEX NAME)



RN 27353-48-6 CAPLUS
 CN 6(5H)-Phenanthridinone, 2-bromo- (6CI, 7CI, 8CI, 9CI) (CA INDEX NAME)

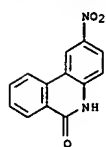


RN 46794-07-4 CAPLUS
 CN 6(5H)-Phenanthridinone, 3,8-diamino- (9CI) (CA INDEX NAME)

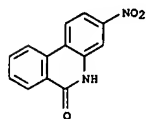


RN 78256-30-1 CAPLUS
 CN 6(5H)-Phenanthridinone, 2-nitro- (6CI, 9CI) (CA INDEX NAME)

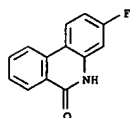
L16 ANSWER 8 OF 8218 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



RN 97136-57-7 CAPLUS
 CN 6(5H)-Phenanthridinone, 3-nitro- (6CI, 9CI) (CA INDEX NAME)



RN 220998-74-3 CAPLUS
 CN 6(5H)-Phenanthridinone, 3-fluoro- (9CI) (CA INDEX NAME)



RN 220998-79-8 CAPLUS
 CN 6(5H)-Phenanthridinone, 3-(dimethylamino)- (9CI) (CA INDEX NAME)

RE.CNT 528 THERE ARE 528 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L16 ANSWER 8 OF 8218 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

L16 ANSWER 9 OF 8218 CAPLUS COPYRIGHT 2005 ACS on STN

AN 2002:805765 CAPLUS

DN 137:357425

TI Comparative investigations of genotoxicity in coke plant effluents using

microbial short-term assays and GC/MS analysis

AU Siersdorfer, Christof; Bungert, Michael; Kaltwasser, Heinrich

CS Institut für Mikrobiologie, Universität des Saarlandes, Saarbrücken,

D-66041, Germany

SO Vom Wasser (1998), 91, 87-99

CODEN: VJWJAU; ISSN: 0083-6915

PB Wiley-VCH Verlag GmbH & Co. KGaA

DT Journal

LA German

AB The activated sludge process was evaluated for removal of genotoxic

activity from coke plant wastewater using 2 bacterial short term assays

(Ames-test, umu-test) and to identify the most genotoxic compds. The

assays were performed both with aqueous samples and with concentrated

exts.

Nonconcd. raw wastewater samples showed high promutagenic activity (TA98

+ S9, TA100 + S9) in the Ames-test, but low or no mutagenicity was detected

in most of the aqueous activated sludge treated wastewater samples.

Slightly

different results were obtained with the Ames- and the umu-test. With

the

umu-test no genotoxicity was detected in the biol. treated wastewater and

this test was also less sensitive with raw wastewater. The umuC-inducing

rate was strongly influenced by the cytotoxicity of the raw wastewater

samples, and the metabolic activation had no stimulating effects. After

biol. treatment extractable residue orgs. still showed a substantial

presence of specific genotoxicity with both assays. But a calcn. in

terms

of liter equivalent of the original wastewater indicated a removal of

genotoxic potency by the biol. treatment of 97% in the Ames-test and of

85% in the umu-test. After fractionation of the genotoxic exts. by

acid/basic/neutral partitioning the basic fraction of wastewater before

and after biol. treatment indicated the highest activity in the

Ames-test.

In the basic fraction by GC/MS some aromatic N compds. (quinoline,

methylated

quinolines, naphthylamines) were detected, known for their promutagenic

activity. Obviously these compds. were biodegraded.

IT 229-87-8, Phenanthridine

RI: POL (Pollutant); REM (Removal or disposal); OCCU (Occurrence); PROC

(Process)

(evaluation of activated sludge process for removal of genotoxic

activity from coke plant wastewater using 2 bacterial short term

assays

(Ames-test, umu-test))

RN 229-87-8 CAPLUS

CN Phenanthridine (6CI, 8CI, 9CI) (CA INDEX NAME)



L16 ANSWER 9 OF 8218 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

RE.CNT 25

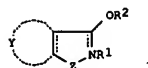
THERE ARE 25 CITED REFERENCES AVAILABLE FOR THIS RECORD

ALL CITATIONS AVAILABLE IN THE RE FORMAT

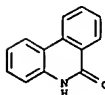
L16 ANSWER 10 OF 8218 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 2002:570718 CAPLUS
 DN 137:119701
 TI Alkoxy-substituted heterocyclic compounds, methods and compositions for inhibiting poly(ADP-ribose) polymerase (PARP) activity, and therapeutic use
 IN Jackson, Paul F.; MacLin, Keith M.; Zhang, Jie
 PA Guilford Pharmaceuticals Inc., USA
 SO U.S., 39 pp., Cont.-in-part of U.S. Ser. No. 922,520.
 CODEN: USXXAM
 DT Patent
 LA English
 FAN.CNT 17

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI US 6426415	B1	20020730	US 1998-79508	19980515
US 6197785	B1	20010306	US 1998-145166	19980901
ZA 9808010	A	19990303	ZA 1998-8010	19980902
ZA 9808011	A	19990303	ZA 1998-8011	19980902
ZA 9808012	A	19990303	ZA 1998-8012	19980902
ZA 9808013	A	19990303	ZA 1998-8013	19980902
ZA 9808015	A	19990303	ZA 1998-8015	19980902
CA 2294110	AA	19990311	CA 1998-2294110	19980902
WO 9911628	A1	19990311	WO 1998-US18226	19980902
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, GR, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
AU 9892991	A1	19990322	AU 1998-92991	19980902
AU 752768	B2	20020926		
EP 1012145	A1	20000628	EP 1998-945838	19980902
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
JP 2002511888	T2	20020416	JP 1999-516987	19980902
US 6380211	B1	20020430	US 2000-711953	20001115
PRAI US 1997-922520	A2	19970903		
US 1998-79508	A2	19980515		
US 1998-145166	A	19980901		
WO 1998-US18226	W	19980902		
OS MARPAT 137:119701				
GI				

L16 ANSWER 10 OF 8218 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

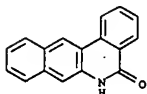


AB The invention provides compds. I [R1(when present) = H, lower alkyl; R2 = lower alkyl, aryl, aralkyl, lower alkanoyl, (CH2)n(CHOH)y(CH2)mA; n = 1-4; yr = 0, 1; m = 0-5; A = cycloalkyl, cycloalkenyl, lower alkanoyl, aryl, etc.; Y = atoms necessary to form fused 5-6-membered (non)aromatic carbo- or heterocyclic ring; Z = CHR2CHR3 (R2, R3 = H, alkyl, aryl, aralkyl), R6C:CR3 (R6, R3 = H, lower alkyl, aryl, etc.), R2C:N, CR2(OH)NR7, C(O)NR7 (R7 = H, lower alkyl)], or a pharmaceutically acceptable salt, prodrug, metabolite, optical isomer, or stereoisomer thereof as PARP inhibitors to prevent and/or treat neural tissue damage resulting from ischemia and reperfusion injury, neurol. disorders and neurodegenerative diseases; to prevent or treat vascular stroke; to treat or prevent cardiovascular disorders; or to treat other disorders such as arthritis; diabetes; septic shock (such as endotoxic shock); inflammatory bowel disorders (such as colitis and Crohn's disease); and cancer. The neuroprotective effect of 3,4-dihydro-5-[4-(1-piperidinyl)butoxy]-1(2H)-isoquinolinone on focal cerebral ischemia in rats is described.
 IT 1015-89-0, 6(5H)-Phenanthridinone 2178-32-7, Benzo[b]phenanthridin-5(6H)-one 22860-48-6 27353-44-2 27353-48-6 78256-30-1
 RI: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (alkoxy-substituted heterocyclic compds., methods and compns. for inhibiting poly(ADP-ribose) polymerase activity, and therapeutic use)
 RN 1015-89-0 CAPLUS
 CN 6(5H)-Phenanthridinone (6CI, 7CI, 8CI, 9CI) (CA INDEX NAME)

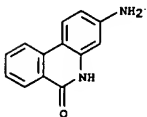


RN 2178-32-7 CAPLUS
 CN Benzo[b]phenanthridin-5(6H)-one (7CI, 8CI, 9CI) (CA INDEX NAME)

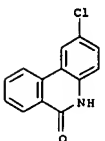
L16 ANSWER 10 OF 8218 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



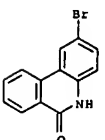
RN 22860-48-6 CAPLUS
 CN 6(5H)-Phenanthridinone, 3-amino- (7CI, 8CI, 9CI) (CA INDEX NAME)



RN 27353-44-2 CAPLUS
 CN 6(5H)-Phenanthridinone, 2-chloro- (6CI, 8CI, 9CI) (CA INDEX NAME)

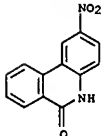


RN 27353-48-6 CAPLUS
 CN 6(5H)-Phenanthridinone, 2-bromo- (6CI, 7CI, 8CI, 9CI) (CA INDEX NAME)



RN 78256-30-1 CAPLUS
 CN 6(5H)-Phenanthridinone, 2-nitro- (6CI, 9CI) (CA INDEX NAME)

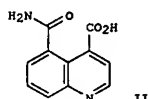
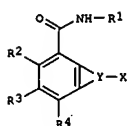
L16 ANSWER 10 OF 8218 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



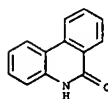
RE.CNT 553 THERE ARE 553 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L16 ANSWER 11 OF 8218 CAPLUS COPYRIGHT 2005 ACS ON STN
 AN 2002:403896 CAPLUS
 DN 136:401646
 TI Preparation of quinolinecarboxamides and related compounds as PARP inhibitors for treatment of neurological and cardiovascular disorders, tissue damage, and cancer
 IN Li, Jia-he; Zhang, Jie
 PA Guilford Pharmaceuticals Inc., USA
 SO U.S., 39 pp., Cont.-in-part of U.S. Ser. No. 79,514, abandoned.
 CODEN: USXXAM
 DT Patent
 LA English
 FAN.CNT 2

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI US 6395749	B1	20020528	US 1998-145178	19980901
ZA 9808018	A	19991115	ZA 1998-8018	19980902
CA 2332279	AA	19991125	CA 1998-2332279	19980902
WO 9959973	A1	19991125	WO 1998-US18186	19980902
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, HR, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CH, GA, GN, GW, ML, MR, NE, SN, TD, TG				
AU 9892979	A1	19991206	AU 1998-92979	19980902
EP 1077944	A1	20010228	EP 1998-945825	19980902
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
JP 2002515488	T2	20020528	JP 2000-549592	19980902
US 2002156050	A1	20021024	US 2002-109646	20020401
PRAI US 1998-79514	B2	19980515		
US 1998-145178	A	19980901		
WO 1998-US18186	W	19980902		
OS MARPAT 136:401646				
GI				

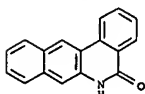


L16 ANSWER 11 OF 8218 CAPLUS COPYRIGHT 2005 ACS ON STN (Continued)
 AB Title compds. I (wherein Y = atoms to form an (un)substituted 5-6 membered, (aromatic) N-heterocycle; X is at the 1-position of ring Y and
 = CO2R5, (un)substituted tetrazolyl, hydroxyisoxazolyl, P(O)(OH)NH2, SO3H, or SO2NH2; R1 = H, (un)substituted (cyclo)alkyl, or (cyclo)alkenyl;
 R2-R5 = H, (un)substituted (cyclo)alkyl, (cyclo)alkenyl, aralkyl, aryl, amino, OH, piperazinyl, piperidinyl, or imidazolyl; R7 = H or (un)substituted (cyclo)alkyl, or (cyclo)alkenyl] were prepared as poly-ADP ribose polymerase (PARP) inhibitors. Examples include synthesis of one invention compound and
 bioassays related to PARP inhibition, neuroprotection, cardioprotection, retinal ischemia protection, radiosensitization, etc. Thus, m-cyanoaniline was coupled with di-Et ethoxymethylenemalonate (100%) and the acrylate ester cyclized to give a mixture of substituted 3-quinolinecarboxylate esters (89.5%). Saponification (100%), reduction to 4-hydroxyquinoline-5-carboxamide (31.5%) using polyphosphoric acid, chlorination with POCl3 (25%), and conversion to the acid using LiBu and CO2 afforded 5-carbamoylquinoline-4-carboxylic acid (II). Thirteen naphthalenecarboxamides, isoquinolin-1(2H)-ones, and analogs were assayed and exhibited PARP inhibition with IC50 values ranging from 0.25 μ M to 100 μ M. Pharmaceutical compns. comprising I are useful for the treatment of neurol. and cardiovascular disorders, tissue damage, cancer, and related conditions.
 IT 1015-89-09, 6(5H)-Phenanthridinone 2178-32-7P, Benzo[b]phenanthridin-5(6H)-one 22860-46-6P 27353-44-2P 27353-48-6P 78256-30-1P
 RI: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
 (PARP inhibitor; preparation of (iso)quinolinecarboxamides and related compds. as PARP inhibitors for treatment of neurol. and cardiovascular disorders, tissue damage, and cancer)
 RN 1015-89-0 CAPLUS
 CN 6(5H)-Phenanthridinone (6CI, 7CI, 8CI, 9CI) (CA INDEX NAME)

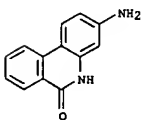


RN 2178-32-7 CAPLUS
 CN Benzo[b]phenanthridin-5(6H)-one (7CI, 8CI, 9CI) (CA INDEX NAME)

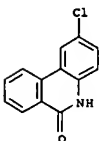
L16 ANSWER 11 OF 8218 CAPLUS COPYRIGHT 2005 ACS ON STN (Continued)



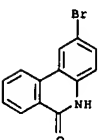
RN 22860-48-6 CAPLUS
 CN 6(5H)-Phenanthridinone, 3-amino- (7CI, 8CI, 9CI) (CA INDEX NAME)



RN 27353-44-2 CAPLUS
 CN 6(5H)-Phenanthridinone, 2-chloro- (6CI, 8CI, 9CI) (CA INDEX NAME)

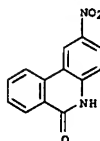


RN 27353-48-6 CAPLUS
 CN 6(5H)-Phenanthridinone, 2-bromo- (6CI, 7CI, 8CI, 9CI) (CA INDEX NAME)



RN 78256-30-1 CAPLUS
 CN 6(5H)-Phenanthridinone, 2-nitro- (6CI, 9CI) (CA INDEX NAME)

L16 ANSWER 11 OF 8218 CAPLUS COPYRIGHT 2005 ACS ON STN (Continued)



RE.CNT 463 THERE ARE 463 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L16 ANSWER 12 OF 8218 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 2002:221148 CAPLUS
 DN 136:258284
 TI Methods and compositions for detection or quantification of nucleic acid species
 IN Drmanac, Radoje
 PA Hyseq, Inc., USA
 SO U.S. Pat. Appl. Publ., 40 pp., Cont.-in-part of U. S. Ser. No. 912,885.
 CODEN: USXXCO
 DT Patent
 LA English
 FAN. CNT 7

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2002034737	A1	20020321	US 1997-947779	19971009
US 6297006	B1	20011002	US 1997-812951	19970304
US 2002042048	A1	20020411	US 1997-892503	19970714
US 6383742	B1	20020507	US 1997-912885	19970815
CA 2300940	AA	19990225	CA 1998-2300940	19980814

<-- WO 9909217 A1 19990225 WO 1998-US16966 19980814

<-- W: AL, AM, AU, AZ, BA, BB, BG, BR, BY, CA, CN, CU, CZ, EE, GE, HR, HU, ID, IL, IS, JP, KG, KP, KR, KZ, LC, LK, LR, LT, LV, MD, MG, MK, MN, MX, NO, NZ, PL, RO, RU, SG, SI, SK, SL, TJ, TM, TR, TT, UA, US, UZ, VN, YU, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
 RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
 AU 9889081 A1 19990308 AU 1998-89081 19980814

<-- EP 1012335 A1 20000628 EP 1998-940915 19980814

<-- R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI

JP 2001514906 T2 20010918 JP 2000-509878 19980814
 US 2003108897 A1 20030612 US 2002-187251 20020701
 US 2003036084 A1 20030220 US 2002-200723 20020722
 PRAI US 1997-812951 A2 19970304

US 1997-892503 A2 19970714
 US 1997-912885 A2 19970815
 US 1997-912885 A2 19970815
 US 1997-784747 A2 19970116
 US 1997-947779 A 19971009
 US 1997-959365 A 19971028
 US 1998-83861 B1 19980521
 WO 1998-US16966 W 19980814

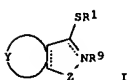
AB The present invention provides a method for detecting a target nucleic acid species using an array of probes affixed to a substrate and a plurality of labeled probes. The invention relates to oligonucleotide probes attached to discrete particles wherein the particles can be grouped into a plurality of sets based on a phys. property. A different probe is attached to the discrete particles of each set, and the identity of the probe is determined by identifying the discrete particles from their phys. property. The phys. property includes any that can be used to

L16 ANSWER 13 OF 8218 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 2002:172489 CAPLUS
 DN 136:210614
 TI Thioalkyl compounds, methods, and compositions for inhibiting PARP activity and treatment of diseases
 IN Jackson, Paul F.; MacIain, Keith M.; Zhang, Jie
 PA USA
 SO U.S. Pat. Appl. Publ., 44 pp., Cont.-in-part of U. S. Ser. No. 79,513, abandoned.
 CODEN: USXXCO
 DT Patent
 LA English
 FAN. CNT 17

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2002028813	A1	20020307	US 1998-145179	19980901
WO 9911623	A1	19990311	WO 1998-US18184	19980902

<-- W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GR, GU, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
 RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
 AU 9892978 A1 19990322 AU 1998-92978 19980902

<-- PRAI US 1997-922520 B2 19970903
 US 1998-79513 B2 19980515
 US 1998-145179 A 19980901
 WO 1998-US18184 W 19980902
 OS MARPAT 136:210614
 GI



AB Thioalkyl compds. and their pharmaceutically acceptable salt, hydrate, ester, solvate, prodrug, metabolite, stereoisomer, or mixts. thereof are described as inhibitors of poly(ADP-ribose) polymerase (PARP) and therapeutic agents for focal cerebral ischemia (neuroprotection) and heart

ischemia-reperfusion injury in rats, protection against retinal ischemia, stroke, and heart reperfusion injury in humans, and many other therapeutic applications. Compound (I) was one of the most active substance with

IC50 value of 0.25 μ M for inhibition of PARP.

1015-89-0, 6(5H)-Phenanthridinone 2178-32-7, Benzo[b]phenanthridin-5(6H)-one 22860-48-6 27353-44-2

27353-48-6 78256-30-1

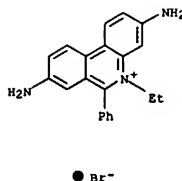
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

L16 ANSWER 12 OF 8218 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)
 differentiate the discrete particles, and includes, for example, size, fluorescence, radioactivity, electromagnetic charge, or absorbance, or label(s) may be attached to the particle such as a dye, a radionuclide, or an EML. In a preferred embodiment, discrete particles are sepd. by a flow

cytometer which detects the size, charge, fluorescence, or absorbance of the particle. The invention also relates to methods using the probes complexed with the discrete particles to analyze target nucleic acids.

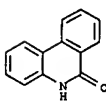
IT 1239-45-8, Ethidium bromide
 RL: ARU (Analytical role, unclassified); ANST (Analytical study) (agent for improving discrimination of matches and mismatches; methods and compns. for detection or quantification of nucleic acid species)

RN 1239-45-8 CAPLUS
 CN Phenanthridinium, 3,8-diamino-5-ethyl-6-phenyl-, bromide (8CI, 9CI) (CA INDEX NAME)

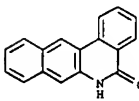


L16 ANSWER 13 OF 8218 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)
 (thioalkyl compds., methods, and compns. for inhibiting PARP activity and treatment of diseases)

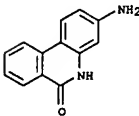
RN 1015-89-0 CAPLUS
 CN 6(5H)-Phenanthridinone (6CI, 7CI, 8CI, 9CI) (CA INDEX NAME)



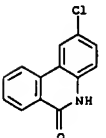
RN 2178-32-7 CAPLUS
 CN Benzo[b]phenanthridin-5(6H)-one (7CI, 8CI, 9CI) (CA INDEX NAME)



RN 22860-48-6 CAPLUS
 CN 6(5H)-Phenanthridinone, 3-amino- (7CI, 8CI, 9CI) (CA INDEX NAME)

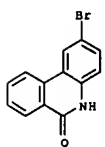


RN 27353-44-2 CAPLUS
 CN Benzo[b]phenanthridinone, 2-chloro- (6CI, 8CI, 9CI) (CA INDEX NAME)

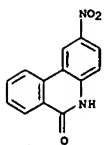


RN 27353-48-6 CAPLUS
 CN 6(5H)-Phenanthridinone, 2-bromo- (6CI, 7CI, 8CI, 9CI) (CA INDEX NAME)

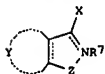
L16 ANSWER 13 OF 8218 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



RN 78256-30-1 CAPLUS
CN 6(5H)-Phenanthridinone, 2-nitro- (6CI, 9CI) (CA INDEX NAME)



L16 ANSWER 14 OF 8218 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



AB PARP-inhibiting oxo-substituted heterocyclic compds., compns. containing them, therapeutic methods of using them, and processes for making them are disclosed. The compds., containing at least one ring nitrogen, are I [X

= double-bonded O, OH; R7 (when present) = H, lower alkyl; Y = atoms necessary to form fused mono-, bi- or tricyclic, carbocyclic or heterocyclic ring, wherein each individual ring has 5-6 ring member

atoms;
Z = (i) CHR2CHR3 (R2, R3 = H, alkyl, aryl, aralkyl); (ii) R6-CR3 (R3, R6 = H, lower alkyl, aryl, aralkyl, halo, NO2, COOR7, NR7R8 (R8 = H, Cl-C9 alkyl), or R6 and R3 taken together form fused aromatic ring, wherein

each individual ring has 5-6 ring members); (iii) R2C=N; (i.v.) CR2(OH)NR7;

(v) C(O)NR7) or a pharmaceutically acceptable base or acid addition salt, hydrate, ester, solvate, prodrug, metabolite, stereoisomer or mixture thereof.

IT 1015-89-0, 6(5H)-Phenanthridinone 2178-32-7, Benzo[b]phenanthridin-5(6H)-one 17613-44-4, 6(5H)-Phenanthridinone, 1-amino- 17726-57-7, 1-Phenanthridinecarboxylic acid, 5,6-dihydro-6-oxo- 22860-48-6, 6(5H)-Phenanthridinone, 3-amino- 23818-44-2, 6(5H)-Phenanthridinone, 4-amino- 27353-44-2, 6(5H)-Phenanthridinone, 2-chloro- 27353-48-6, 6(5H)-Phenanthridinone, 2-bromo- 46794-07-4, 6(5H)-Phenanthridinone, 3,8-diamino- 78256-30-1, 6(5H)-Phenanthridinone, 2-nitro- 97136-57-7, 6(5H)-Phenanthridinone, 3-nitro- 220998-74-3, 6(5H)-Phenanthridinone, 3-fluoro- 220998-79-8, 6(5H)-Phenanthridinone, 3-(dimethylamino)- 221081-42-1, 6(5H)-Phenanthridinone, 2-chloro-10-methyl- 221081-42-1D, 6(5H)-Phenanthridinone, 2-chloro-10-methyl-, prodrugs and metabolites and esters and stereoisomers 221081-46-5, 6(5H)-Phenanthridinone, 10-methyl-2-nitro- 221081-46-5D, 6(5H)-Phenanthridinone, 10-methyl-2-nitro-, prodrugs and metabolites and esters and stereoisomers 221081-51-2, 6(5H)-Phenanthridinone, 10-amino-2-chloro- 221081-51-2D, 6(5H)-Phenanthridinone, 10-amino-2-chloro-, prodrugs and metabolites and esters and stereoisomers 221081-52-3, 6(5H)-Phenanthridinone, 10-amino-2-nitro- 221081-52-3D, 6(5H)-Phenanthridinone, 10-amino-2-nitro-, prodrugs and metabolites and esters and stereoisomers 221081-56-7, 6(5H)-Phenanthridinone, 2-chloro-10-nitro- 221081-56-7D, 6(5H)-Phenanthridinone, 2-chloro-10-nitro-, prodrugs and metabolites and esters and stereoisomers 221081-59-0, 6(5H)-Phenanthridinone, 2,10-dinitro- 221081-59-0D, 6(5H)-Phenanthridinone, 2,10-dinitro-, prodrugs and metabolites and esters and stereoisomers 221081-61-4, 6(5H)-Phenanthridinone, 2-chloro-10-hydroxy- 221081-61-4D, 6(5H)-Phenanthridinone, 2-chloro-10-hydroxy-, prodrugs and metabolites and esters and stereoisomers 221081-62-5, 6(5H)-Phenanthridinone,

L16 ANSWER 14 OF 8218 CAPLUS COPYRIGHT 2005 ACS on STN

AN 2002:143287 CAPLUS
DN 136:194277

TI Oxo-substituted heterocyclic compounds, therapeutic methods, and compositions for inhibiting poly(ADP-ribose) polymerase (PARP) activity
IN Li, Jia-he; Tays, Kevin Leonard; Zhang, Jie
PA USA

SO U.S. Pat. Appl. Publ., 50 pp., Cont.-in-part of U.S. Ser. No. 79,509, abandoned.

CODEN: USXXCO

DT Patent

LA English

FAN. CNT 17

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2002022636	A1	20020221	US 1998-145180	19980901
CA 2294118	AA	19990311	CA 1998-2294118	19980902
WO 9911624	A1	19990311	WO 1998-US18195	19980902
W:	AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, HR, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
RW:	GH, GM, KE, LG, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG			
AU 9892986	A1	19990322	AU 1998-92986	19980902
EP 1009739	A2	20000621	EP 1998-945833	19980902
R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI			
BR 9812428	A	20000926	BR 1998-12428	19980902
TR 200001557	T2	20010122	TR 2000-200001557	19980902
JP 2002512637	T2	20020423	JP 1999-516977	19980902
NO 2000001002	A	20000427	NO 2000-1002	20000228
US 6235748	B1	20010522	US 2000-524750	20000314
US 2003105102	A1	20030605	US 2002-109730	20020401
PRAI US 1997-922520	B2	19970903		
US 1998-79509	B2	19980515		
US 1998-145180	A	19980901		
WO 1998-US18195	W	19980902		
OS MARPAT 136:194277				
GI				

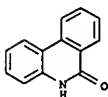
L16 ANSWER 14 OF 8218 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

10-hydroxy-2-nitro- 221081-62-5D, 6(5H)-Phenanthridinone, 10-hydroxy-2-nitro-, prodrugs and metabolites and esters and stereoisomers

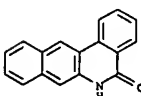
221081-65-8, 6(5H)-Phenanthridinone, 10-bromo-2-chloro- 221081-65-8D, 6(5H)-Phenanthridinone, 10-bromo-2-chloro-, prodrugs and metabolites and esters and stereoisomers 221081-68-1, 6(5H)-Phenanthridinone, 10-bromo-2-nitro- 221081-68-1D, 6(5H)-Phenanthridinone, 10-bromo-2-nitro-, prodrugs and metabolites and esters and stereoisomers 221081-71-6, 6(5H)-Phenanthridinone, 2-chloro-10-nitroso- 221081-71-6D, 6(5H)-Phenanthridinone, 2-chloro-10-nitroso-, prodrugs and metabolites and esters and stereoisomers 221081-74-9, 4H-Cyclopropa[k]phenanthridin-4-one, 8-chloro-1,5-dihydro-1,1-dihydroxy- 221081-74-8D, 4H-Cyclopropa[k]phenanthridin-4-one, 8-chloro-1,5-dihydro-1,1-dihydroxy-, prodrugs and metabolites and esters and stereoisomers 221081-77-2, 4H-Cyclopropa[k]phenanthridin-4-one, 1,5-dihydro-1,1-dihydroxy-8-nitro- 221081-77-2D, 4H-Cyclopropa[k]phenanthridin-4-one, 1,5-dihydro-1,1-dihydroxy-8-nitro-, prodrugs and metabolites and esters and stereoisomers
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(Oxo-substituted heterocyclic compounds, therapeutic methods, and

compns. for inhibiting poly(ADP-ribose) polymerase (PARP) activity)

RN 1015-89-0 CAPLUS
CN 6(5H)-Phenanthridinone (6CI, 7CI, 8CI, 9CI) (CA INDEX NAME)

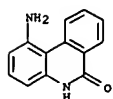


RN 2178-32-7 CAPLUS
CN Benzo[b]phenanthridin-5(6H)-one (7CI, 8CI, 9CI) (CA INDEX NAME)

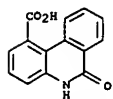


RN 17613-44-4 CAPLUS
CN 6(5H)-Phenanthridinone, 1-amino- (8CI, 9CI) (CA INDEX NAME)

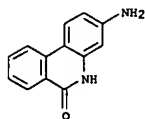
L16 ANSWER 14 OF 8218 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



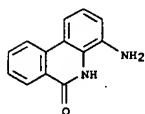
RN 17726-57-7 CAPLUS
CN 1-Phenanthridinecarboxylic acid, 5,6-dihydro-6-oxo- (8CI, 9CI) (CA INDEX NAME)



RN 22860-48-6 CAPLUS
CN 6(5H)-Phenanthridinone, 3-amino- (7CI, 8CI, 9CI) (CA INDEX NAME)



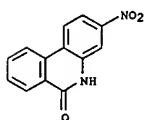
RN 23818-44-2 CAPLUS
CN 6(5H)-Phenanthridinone, 4-amino- (8CI, 9CI) (CA INDEX NAME)



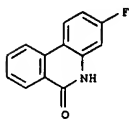
RN 27353-44-2 CAPLUS
CN 6(5H)-Phenanthridinone, 2-chloro- (6CI, 8CI, 9CI) (CA INDEX NAME)

L16 ANSWER 14 OF 8218 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

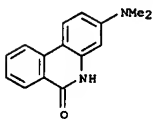
RN 97136-57-7 CAPLUS
CN 6(5H)-Phenanthridinone, 3-nitro- (6CI, 9CI) (CA INDEX NAME)



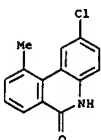
RN 220998-74-3 CAPLUS
CN 6(5H)-Phenanthridinone, 3-fluoro- (9CI) (CA INDEX NAME)



RN 220998-79-8 CAPLUS
CN 6(5H)-Phenanthridinone, 3-(dimethylamino)- (9CI) (CA INDEX NAME)

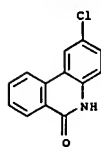


RN 221081-42-1 CAPLUS
CN 6(5H)-Phenanthridinone, 2-chloro-10-methyl- (9CI) (CA INDEX NAME)

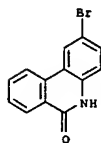


RN 221081-42-1 CAPLUS

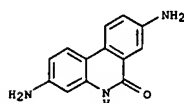
L16 ANSWER 14 OF 8218 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



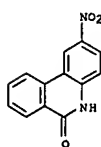
RN 27353-48-6 CAPLUS
CN 6(5H)-Phenanthridinone, 2-bromo- (6CI, 7CI, 8CI, 9CI) (CA INDEX NAME)



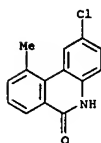
RN 46794-07-4 CAPLUS
CN 6(5H)-Phenanthridinone, 3,8-diamino- (9CI) (CA INDEX NAME)



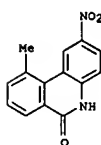
RN 78256-30-1 CAPLUS
CN 6(5H)-Phenanthridinone, 2-nitro- (6CI, 9CI) (CA INDEX NAME)



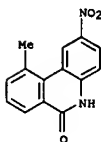
L16 ANSWER 14 OF 8218 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)
CN 6(5H)-Phenanthridinone, 2-chloro-10-methyl- (9CI) (CA INDEX NAME)



RN 221081-46-5 CAPLUS
CN 6(5H)-Phenanthridinone, 10-methyl-2-nitro- (9CI) (CA INDEX NAME)

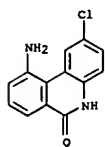


RN 221081-46-5 CAPLUS
CN 6(5H)-Phenanthridinone, 10-methyl-2-nitro- (9CI) (CA INDEX NAME)

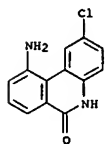


RN 221081-51-2 CAPLUS
CN 6(5H)-Phenanthridinone, 10-amino-2-chloro- (9CI) (CA INDEX NAME)

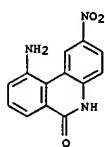
L16 ANSWER 14 OF 8218 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



RN 221081-51-2 CAPLUS
CN 6(5H)-Phenanthridinone, 10-amino-2-chloro- (9CI) (CA INDEX NAME)

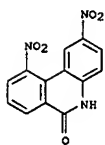


RN 221081-52-3 CAPLUS
CN 6(5H)-Phenanthridinone, 10-amino-2-nitro- (9CI) (CA INDEX NAME)

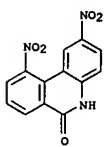


RN 221081-52-3 CAPLUS
CN 6(5H)-Phenanthridinone, 10-amino-2-nitro- (9CI) (CA INDEX NAME)

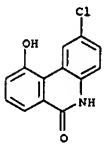
L16 ANSWER 14 OF 8218 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



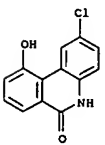
RN 221081-59-0 CAPLUS
CN 6(5H)-Phenanthridinone, 2,10-dinitro- (9CI) (CA INDEX NAME)



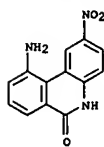
RN 221081-61-4 CAPLUS
CN 6(5H)-Phenanthridinone, 2-chloro-10-hydroxy- (9CI) (CA INDEX NAME)



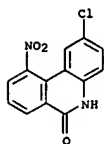
RN 221081-61-4 CAPLUS
CN 6(5H)-Phenanthridinone, 2-chloro-10-hydroxy- (9CI) (CA INDEX NAME)



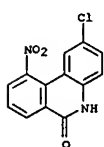
L16 ANSWER 14 OF 8218 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



RN 221081-56-7 CAPLUS
CN 6(5H)-Phenanthridinone, 2-chloro-10-nitro- (9CI) (CA INDEX NAME)

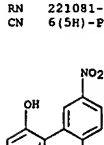


RN 221081-56-7 CAPLUS
CN 6(5H)-Phenanthridinone, 2-chloro-10-nitro- (9CI) (CA INDEX NAME)

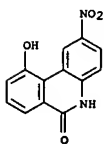


RN 221081-59-0 CAPLUS
CN 6(5H)-Phenanthridinone, 2,10-dinitro- (9CI) (CA INDEX NAME)

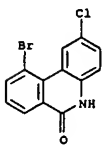
L16 ANSWER 14 OF 8218 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



RN 221081-62-5 CAPLUS
CN 6(5H)-Phenanthridinone, 10-hydroxy-2-nitro- (9CI) (CA INDEX NAME)

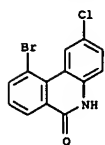


RN 221081-65-8 CAPLUS
CN 6(5H)-Phenanthridinone, 10-bromo-2-chloro- (9CI) (CA INDEX NAME)

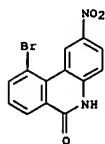


RN 221081-65-8 CAPLUS
CN 6(5H)-Phenanthridinone, 10-bromo-2-chloro- (9CI) (CA INDEX NAME)

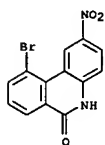
L16 ANSWER 14 OF 8218 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



RN 221081-68-1 CAPLUS
CN 6(5H)-Phenanthridinone, 10-bromo-2-nitro- (9CI) (CA INDEX NAME)

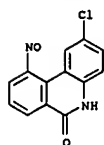


RN 221081-68-1 CAPLUS
CN 6(5H)-Phenanthridinone, 10-bromo-2-nitro- (9CI) (CA INDEX NAME)

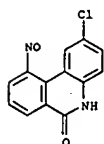


RN 221081-71-6 CAPLUS
CN 6(5H)-Phenanthridinone, 2-chloro-10-nitroso- (9CI) (CA INDEX NAME)

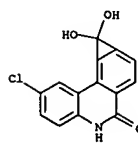
L16 ANSWER 14 OF 8218 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



RN 221081-71-6 CAPLUS
CN 6(5H)-Phenanthridinone, 2-chloro-10-nitroso- (9CI) (CA INDEX NAME)

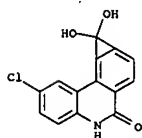


RN 221081-74-9 CAPLUS
CN 4H-Cyclopropa[k]phenanthridin-4-one, 8-chloro-1,5-dihydro-1,1-dihydroxy- (9CI) (CA INDEX NAME)

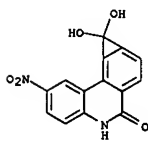


RN 221081-74-9 CAPLUS
CN 4H-Cyclopropa[k]phenanthridin-4-one, 8-chloro-1,5-dihydro-1,1-dihydroxy- (9CI) (CA INDEX NAME)

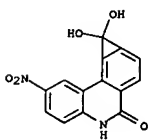
L16 ANSWER 14 OF 8218 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



RN 221081-77-2 CAPLUS
CN 4H-Cyclopropa[k]phenanthridin-4-one, 1,5-dihydro-1,1-dihydroxy-8-nitro- (9CI) (CA INDEX NAME)



RN 221081-77-2 CAPLUS
CN 4H-Cyclopropa[k]phenanthridin-4-one, 1,5-dihydro-1,1-dihydroxy-8-nitro- (9CI) (CA INDEX NAME)



L16 ANSWER 15 OF 8218 CAPLUS COPYRIGHT 2005 ACS on STN

AN 2002:51934 CAPLUS
DN 136:98857
TI Process for discriminating and counting erythroblasts
IN Houwen, Berend; Wang, Fu-Sheng; Tsuji, Tomohiro; Sakata, Takashi;
PA Sysmex Corporation, USA
SO U.S. Pat. Appl. Publ., 15 pp., Cont.-in-part of U.S. Ser. No. 19,932,
abandoned.
CODEN: USXXCO
DT Patent
LA English
FAN.CYT 2

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2002006631	A1	20020117	US 1998-58323	19980409
US 6911313	B2	20050628		
JP 11326323	A2	19991126	JP 1999-100193	19990407

US 2004241770	A1	20041202	US 2004-882034	20040629
US 1998-19932	B2	19980206		
US 1998-58323	A	19980409		

AB A method for discriminating and counting erythroblasts comprises the steps of: (i) staining leukocytes in a hematol. sample by adding a fluorescent labeled antibody capable of binding specifically with leukocytes to the hematol. sample; (ii) raising the permeability only of cell membranes of erythroblasts in the hematol. sample to a nucleotide fluorescent dye

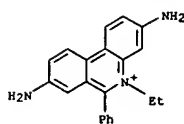
which does not permeate a cell membrane usually, the nucleotide fluorescent dye having a fluorescent spectrum capable of being distinguished from that of a fluorescent labeling compound of the fluorescent labeled antibody in

step (i); (iii) staining nuclei of the erythroblasts in the hematol. sample with the nucleotide fluorescent dye; (iv) subjecting the hematol. sample to flow cytometry to detect at least two fluorescent signals from each cell; and (v) discriminating and counting the erythroblasts from difference in intensity between the at least two fluorescent signals.

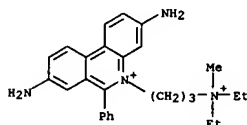
IT 1239-45-8, Ethidium bromide 25335-16-4, Propidium iodide 61926-22-5, Ethidium homodimer-1 180389-01-9, Ethidium homodimer-2
RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses)
(process for discriminating and counting erythroblasts)

RN 1239-45-8 CAPLUS
CN Phenanthridinium, 3,8-diamino-5-ethyl-6-phenyl-, bromide (8CI, 9CI) (CA INDEX NAME)

L16 ANSWER 15 OF 8218 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

● Br⁻

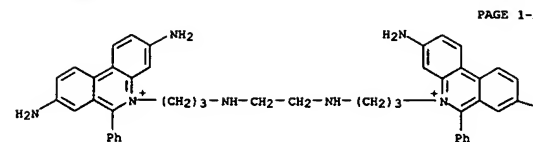
RN 25535-16-4 CAPLUS
 CN Phenanthridinium,
 3,8-diamino-5-[3-(diethylmethyllumonio)propyl]-6-phenyl-
 , diiodide (8CI, 9CI) (CA INDEX NAME)

● 2 I⁻

RN 61926-22-5 CAPLUS
 CN Phenanthridinium, 5,5'-[1,2-ethanediylbis(imino-3,1-propanediyl)]bis[3,8-diamino-6-phenyl-, dichloride, dihydrochloride (9CI) (CA INDEX NAME)

L16 ANSWER 15 OF 8218 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

L16 ANSWER 15 OF 8218 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

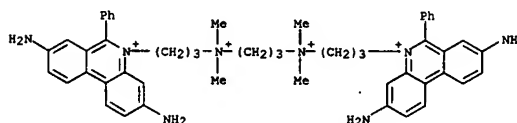
● 2 Cl⁻

● 2 HCl

PAGE 1-B

NH₂

RN 180389-01-9 CAPLUS
 CN Phenanthridinium, 5,5'-[1,3-propanediylbis(dimethyliminio)-3,1-propanediyl]bis[3,8-diamino-6-phenyl-, tetraiodide (9CI) (CA INDEX NAME)

● 4 I⁻

L16 ANSWER 16 OF 8218 CAPLUS COPYRIGHT 2005 ACS on STN
 RN 2001:741468 CAPLUS
 DN 135:299472
 TI Sandwich hybridization for detection of mRNAs using immobilized probe arrays
 IN Akitaya, Tatsuo; Mitsuhashi, Masato; Cooper, Allan
 PA Hitachi Chemical Research Center, Inc., USA; Hitachi Chemical Company, Ltd.
 SO U.S., 221 pp., Cont.-in-part of U.S. Ser. No. 857,059, abandoned.
 CODEN: USXGAM
 DT Patent
 LA English
 FAN.CNT 3

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 6300058	B1	20011009	US 1992-974409	19921112
WO 9315221	A1	19930805	WO 1993-US977	19930129

W: CA, JP, KR, US
 RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE
 JP 07506482 T2 19950720 JP 1993-512765 19930129

PRAI US 1992-827208 B2 19920129
 US 1992-827975 B2 19920129
 US 1992-857059 B2 19920324
 US 1992-974409 A2 19921112
 WO 1993-US977 W 19930129

AB The present invention provides a method for detecting and quantifying mRNA

in a sample. The mRNA that can be detected has a unique sequence. The method includes immobilizing a first polynucleotide to an insol. support. The first polynucleotide has a first sequence that hybridizes to the unique sequence on the mRNA. After immobilization of the first polynucleotide, the sample is applied to the insol. support under conditions that allow the unique sequence on the mRNA to hybridize with the first polynucleotide. Thereafter, a second polynucleotide is applied to the insol. support. This second polynucleotide has a second sequence thereon that hybridizes to a portion of the mRNA other than the unique sequence. The application of the second polynucleotide is performed

under conditions that allow the second polynucleotide to hybridize with mRNA immobilized on said support, if present. Finally, the amount of the second polynucleotide immobilized on the support is measured to provide an indication of the amount of mRNA present in the sample. Polynucleotide immobilized supports and sequences useful in the method are also provided.

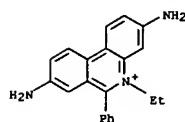
Use of the method to quantify a number of defined sequences in human cell culture lines is demonstrated. Criteria for the design of probes are also discussed.

IT 1239-45-8, Ethidium bromide

RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses) (stain for fluorometric detection of hybrids; sandwich hybridization for detection of mRNAs using immobilized probe arrays)

RN 1239-45-8 CAPLUS
 CN Phenanthridinium, 3,8-diamino-5-ethyl-6-phenyl-, bromide (8CI, 9CI) (CA INDEX NAME)

L16 ANSWER 16 OF 8218 CAPIUS COPYRIGHT 2005 ACS on STN (Continued)

● Br⁻RE.CNT 81 THERE ARE 81 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L16 ANSWER 17 OF 8218 CAPIUS COPYRIGHT 2005 ACS on STN

AN 2001:611703 CAPIUS
 DN 135:175357
 TI Assay and reagent kit for evaluation of multi-drug resistance in cells
 IN Sarkadi, Balazs; Homolya, Laszlo; Hollo, Zsolt
 PA Solvo Biotechnology, Hung.
 SO U.S., 17 pp., Cont.-in-part of U.S. 5,872,014.
 CODEN: USXXAM

DT Patent
 LA English

FAN.CNT 2

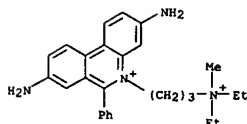
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 6277655	B1	20010821	US 1998-203553	19981201
US 5872014	A	19990216	US 1997-928528	19970912
US 2001019846	A1	20010906	US 2001-840791	20010423
US 6391656	B2	20020521		
US 1994-322702	B1	19941013		
US 1997-928528	A2	19970912		
HU 1994-2511	A	19940831		
US 1998-203553	A3	19981201		

AB Disclosed herein are methods and reagent kits for the quant. in vitro determination of the functional determination of multi-drug resistance in cells, as well as for the clin. screening of potential modulators of multi-drug resistant transport activity in cells. The method of the invention is based on the measurement of the accumulation rate of free calcein within the cells of the specimen (advantageously by fluorescence measurement), after exposing the cells in vitro to a cell permeable form of calcein that is a good substrate for MDR proteins present in the sample. The cell permeable form of calcein is converted within the cell by intracellular enzymes to free calcein. Comparison of free calcein accumulation in the presence and absence of a potential inhibitor of transport activity permits the rapid screening of such inhibitors. Addnl., evaluation of free calcein accumulation rates in the presence of inhibitors of all MDR transport in comparison with calcein accumulation rates in the presence of selective inhibitors of MDR transport permits the evaluation of the functional type of MDR being exhibited.

IT 25535-16-4, Propidium iodide
 RI: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses) (assay and reagent kit for evaluation of multi-drug resistance in cells)

RN- 25535-16-4 CAPIUS
 CN Phenanthridinium,
 3,8-diamino-3-[3-(diethylmethylammonio)propyl]-6-phenyl-
 , diiodide (8CI, 9CI) (CA INDEX NAME)

L16 ANSWER 17 OF 8218 CAPIUS COPYRIGHT 2005 ACS on STN (Continued)

● 2 I⁻RE.CNT 37 THERE ARE 37 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

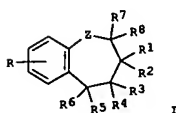
L16 ANSWER 18 OF 8218 CAPIUS COPYRIGHT 2005 ACS on STN

AN 2001:560070 CAPIUS
 DN 135:137410
 TI Preparation of ileal bile acid transport inhibiting benzothiepinines for combination therapy with HMG Co-A reductase inhibitors.
 IN Keller, Bradley T.; Glenn, Kevin C.; Manning, Robert E.
 PA G.D. Searle and Co., USA
 SO U.S., 356 pp., Cont.-in-part of U.S. Ser. No. 831,284, abandoned.
 CODEN: USXXAM

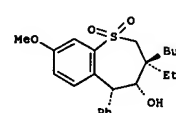
DT Patent
 LA English

FAN.CNT 9

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 6268392	B1	20010731	US 1998-37308	19980309
CA 2506703	AA	19970918	CA 1997-2506703	19970311
EP 1440972	A1	20040728	EP 2004-10088	19970311
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, PT, IE,				
AU 761249	B2	20030529	AU 2000-53394	20000816
US 6420417	B1	20020716	US 2000-676466	20000929
US 2003171426	A1	20030911	US 2002-76091	20020215
US 6642268	B2	20031104		
US 2004157915	A1	20040812	US 2003-620460	20030717
US 6943189	B2	20050913		
PRAI US 1994-305526	A2	19940912		
US 1995-517051	A1	19950821		
US 1996-13119P	P	19960311		
US 1997-40660P	P	19970311		
US 1997-816065	A2	19970311		
US 1997-831284	B2	19970331		
AU 1997-23266	A3	19970311		
CA 1997-2248586	A3	19970311		
EP 1997-915976	A3	19970311		
US 1998-37308	A3	19980309		
US 2000-676466	A3	20000929		
US 2002-76091	A1	20020215		
OS MARPAT 135:137410				
GI				



I



II

AB Title compds. [I; R = H or 1-4 of alkyl, alkenyl, alkynyl, acyloxy, aryl, aralkyl, halo, etc.; R1, R2 = H, (substituted) alkyl, alkenyl, alkynyl, haloalkyl, alkylaryl, alkoxy, dialkylamino, etc.; R1R2C = cycloalkylidene;
 R3, R4 = H, alkyl, alkenyl, alkynyl, acyloxy, aryl, heterocyclyl, heteroaryl, etc.; R3R4 = O, S, NOR1, etc.; R11 = H, alkyl, alkenyl,

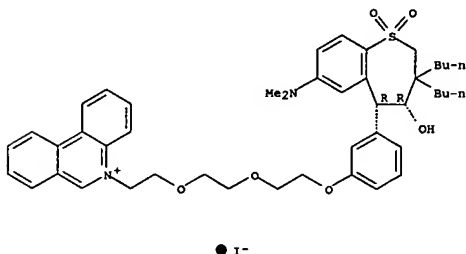
L16 ANSWER 18 OF 8218 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)
alkynyl, aryl, aralkyl, etc.; R5, R6 = H, alkyl, alkenyl, alkynyl, aryl,
cycloalkyl, heterocyclyl, etc.; R7, R8 = H, alkyl; Z = SOO-2), were
prepd.

Co-A A compn. comprising an ileal bile acid transport inhibitor and an HMG
reductase inhibitor is claimed. Thus, title compd. (II) (prepn. via
2-mecapto-4-methoxybenzophenone given) at 0.2% as an ileal perfusion in
guinea pigs reduced HDL cholesterol from 89 mg% to 76 mg%.

IT 197374-29-1P
RL: BAC (Biological activity or effector, except adverse); BSU
(Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use);
BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of ileal bile acid transport inhibiting benzothiepinines
for combination therapy with HMG Co-A reductase inhibitors)

RN 197374-29-1 CAPLUS
CN Phenanthridinium, 5-[2-[2-[3-[(4R,5R)-3,3-dibutyl-7-(dimethylamino)-
2,3,4,5-tetrahydro-4-hydroxy-1,1-dioxido-1-benzothiepin-5-
yl]phenoxy]ethoxy]ethoxy]ethyl]-, iodide, rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.



RE.CNT 76 THERE ARE 76 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L16 ANSWER 19 OF 8218 CAPLUS COPYRIGHT 2005 ACS on STN
AN 2001:371672 CAPLUS
DN 134:368389
TI Ink jet recording liquid and production
IN Aida, Seiji; Fujigamori, Tsutomu; Ueki, Hisashi; Toyoda, Ichiro; Satake,
Sunao; Sawada, Seiji; Iida, Yasuharu
PA Toyo Ink Manufacturing Co., Ltd., Japan
SO U.S., 21 pp., Cont.-in-part of U.S. Ser. No. 714,129.
CODEN: USXGAM
DT Patent
LA English
FAN.CNT 2

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI US 6235099	B1	20010522	US 1997-527702	19970728
WO 9623032	A1	19960801	WO 1996-JP147	19960126

<-- W: JP, KR, US
RW: CH, DE, FR, GB
JP 2001139863 A2 20010522 JP 2000-286532 19960126
JP 3516072 B2 20040405
US 5716435 A 19980210 US 1996-714129 19960917

<-- PRAI JP 1995-11501 A 19950127
JP 1995-11502 A 19950127
JP 1995-11503 A 19950127
WO 1996-JP147 A2 19960126
US 1996-714129 A2 19960917
JP 1995-238161 A 19950918
JP 1996-522780 A3 19960126
MARPAT 134:368389

OS A water-dispersed ink jet recording liquid excellent in water resistance
AB and

transparency and also excellent in ejection from a nozzle, contains as
colorant, a water-based dispersion of an organic pigment (A) which is
≥1 quinacridone pigment, benzimidazolone pigment, an insol. azo
pigment, fused azo pigment, quinophthalone pigment, naphthol pigment,
perylene pigment and isoindolinone pigment having an average particle
diameter

10-150 nm, (A) being obtained by mech. kneading a mixture containing ≥3
components of the organic pigment (A), a water-soluble inorg. salt (B)

≥3 times as much as the organic pigment (A) and a water-soluble solvent (C)

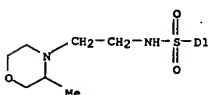
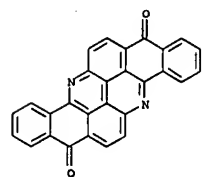
at 30-65° to finely mill the organic pigment (A), and then removing the
water-soluble inorg. salt (B) and the water-soluble solvent (C) by
washing the

kneaded mixture with H2O.

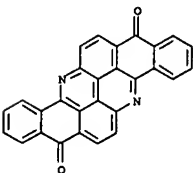
IT 181725-93-9 181829-72-1 181829-73-2
RL: PEP (Physical, engineering or chemical process); TEM (Technical or
engineered material use); PROC (Process); USES (Uses)
(aqueous dispersion ink jet recording liquid containing salt-milled
fine size pigments)

RN 181725-93-9 CAPLUS
CN Benzo[h]benz[5,6]acridino[2,1,9,8-klmna]acridinesulfonamide,
8,16-dihydro-N-[2-(3-methyl-4-morpholinyl)ethyl]-8,16-dioxo- (9CI) (CA

L16 ANSWER 19 OF 8218 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)
INDEX NAME)



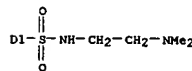
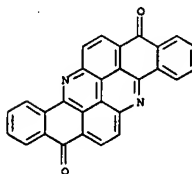
RN 181829-72-1 CAPLUS
CN Benzo[h]benz[5,6]acridino[2,1,9,8-klmna]acridine-8,16-dione,
[[[(dipropylamino)methyl]thio]methyl]- (9CI) (CA INDEX NAME)



(n-Pr)2N-CH2-S-CH2-D1

RN 181829-73-2 CAPLUS
CN Benzo[h]benz[5,6]acridino[2,1,9,8-klmna]acridinesulfonamide,
N-[2-(dimethylamino)ethyl]-8,16-dihydro-8,16-dioxo- (9CI) (CA INDEX
NAME)

L16 ANSWER 19 OF 8218 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



RE.CNT 9 THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L16 ANSWER 20 OF 8218 CAPLUS COPYRIGHT 2005 ACS on STN

AN 2001:241813 CAPLUS

DN 134:263155

TI Vessel for imaging fluorescent particles

IN Niino, Masao; Matsui, Hiroki; Komatsu, Akio

PA Kowa Company Ltd., Japan

SO U.S., 13 pp.

CODEN: USXXAM

DT Patent

LA English

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI US 6211953	B1	20010403	US 1998-213762	19981217
JP 11183358	A2	19990709	JP 1997-356416	19971225

<--

PRAI JP 1997-356416 A 19971225

AB Vessels for imaging fluorescent particles (e.g., leukocytes or the like stained with a fluorescent dye) comprises a tubular body having an upper section, and a lower section defining an interior space for containing fluorescent particles are described in which the lower section of the tubular body has an exterior surface portion forming an entry surface for transmitting into the interior space a beam of light projected in a direction generally parallel to the exterior surface portion of the lower section to illuminate the fluorescent particles. Only the bottom portion of the vessel is illuminated by the excitation light, so background light can be reduced, thereby making it possible to obtain high-contrast images of the fluorescent particles in the vessel.

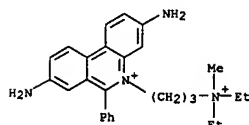
IT 25535-16-4, Propidium iodide

RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses) (leukocyte stains; vessels for imaging fluorescent particles)

RN 25535-16-4 CAPLUS

CN Phenanthridinium,

3,8-diamino-5-[3-(diethylmethylammonio)propyl]-6-phenyl-, diiodide (8CI, 9CI) (CA INDEX NAME)

● 2 I⁻

RE.CNT 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L16 ANSWER 21 OF 8218 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)
alkyl, etc.; Y = atoms necessary to form fused 5- to 6-membered ring that is arom. or nonarom. and carbocyclic or heterocyclic; Z = (i) CHR2CHR3 (R2, R3 = H, alkyl, aryl, aralkyl); (ii) R6C:CR3 (R6, R3 = H, lower alkyl, aryl, aralkyl, Cl, Br, NR7R8 (R7, R8 = H, lower alkyl), or

R6 and R3, taken together form fused 5- to 6-membered ring that is arom. or nonarom. and carbocyclic or heterocyclic); (iii) R2C:N; (iv) CR2(OH)NR7; (v) C(O)NR7 or a pharmaceutically acceptable salt, hydrate, ester, solvate, prodrug, metabolite, stereoisomer, or mixts. thereof. The compds. of the invention can be used to treat cardiovascular diseases and to inhibit PARP activity.

IT 1015-89-0, 6(5H)-Phenanthridinone 2178-32-7,

Benzo[b]phenanthridin-5(6H)-one 22860-48-6 27353-44-2

27353-48-6 78256-30-1 157848-52-7

RL: BAC (Biological activity or effector, except adverse); BSU

(Biological

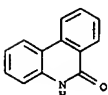
study, unclassified); THU (Therapeutic use); BIOL (Biological study);

USES

(Uses)
(alkoxy-substituted compds. for inhibiting PARP activity and treating cardiovascular disease)

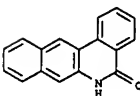
RN 1015-89-0 CAPLUS

CN 6(5H)-Phenanthridinone (6CI, 7CI, 8CI, 9CI) (CA INDEX NAME)



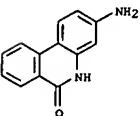
RN 2178-32-7 CAPLUS

CN Benzo[b]phenanthridin-5(6H)-one (7CI, 8CI, 9CI) (CA INDEX NAME)



RN 22860-48-6 CAPLUS

CN 6(5H)-Phenanthridinone, 3-amino- (7CI, 8CI, 9CI) (CA INDEX NAME)



L16 ANSWER 21 OF 8218 CAPLUS COPYRIGHT 2005 ACS on STN

AN 2001:161504 CAPLUS

DN 134:202696

TI Alkoxy-substituted compounds, methods, and compositions for inhibiting poly(ADP-ribose polymerase (PARP) activity and treating cardiovascular disease

IN Jackson, Paul F.; MacIin, Keith M.; Zhang, Jie

PA Guilford Pharmaceuticals Inc., USA

SO U.S., 41 pp., Cont.-in-part of U.S. Ser. No. 79,508.

CODEN: USXXAM

DT Patent

LA English

FAN.CNT 17

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI US 6197785	B1	20010306	US 1998-145166	19980901
US 6426415	B1	20020730	US 1998-79508	19980515
CA 2294110	AA	19990311	CA 1998-2294110	19980902

<--

WO 9911628 A1 19990311 WO 1998-US18226 19980902

<--

W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, HR, HU, ID, IL, IS, JP, KZ, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZW, AM, AZ, BY, BG, KZ, MD, RU, TJ, TM, RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

<--

AU 9892991 A1 19990322 AU 1998-92991 19980902

<--

AU 752768 B2 20020926 EP 1998-945838 19980902

<--

EP 1012145 A1 20000628 EP 1998-945838 19980902

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI

JP 2002511888 T2 20020416 JP 1999-516987 19980902

US 6380211 B1 20020430 US 2000-711953 20001115

PRAI US 1997-922520 B2 19970903

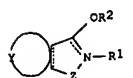
US 1998-79508 A2 19980515

US 1998-145166 A 19980901

WO 1998-US18226 W 19980902

OS MARPAT 134:202696

GI



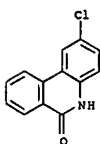
AB The invention discloses compds., compns., methods of use, and processes of

making I [R1 (when present) = H, lower alkyl; R2 = lower alkyl, aryl,

L16 ANSWER 21 OF 8218 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

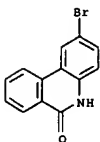
RN 27353-44-2 CAPLUS

CN 6(5H)-Phenanthridinone, 2-chloro- (6CI, 8CI, 9CI) (CA INDEX NAME)



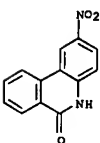
RN 27353-48-6 CAPLUS

CN 6(5H)-Phenanthridinone, 2-bromo- (6CI, 7CI, 8CI, 9CI) (CA INDEX NAME)



RN 78256-30-1 CAPLUS

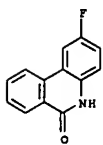
CN 6(5H)-Phenanthridinone, 2-nitro- (6CI, 9CI) (CA INDEX NAME)



RN 157848-52-7 CAPLUS

CN 6(5H)-Phenanthridinone, 2-fluoro- (9CI) (CA INDEX NAME)

L16 ANSWER 21 OF 8218 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

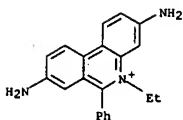
RE.CNT 81 THERE ARE 81 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L16 ANSWER 22 OF 8218 CAPLUS COPYRIGHT 2005 ACS on STN

AN 2001:73441 CAPLUS
DN 134:142776
TI Diagnosis of the fragile X syndrome using the FMR-1 gene sequence and methylation-sensitive restriction endonuclease and PCR primer probes
IN Caskey, C. Thomas; Nelson, David L.; Pieretti, Maura; Warren, Stephen T.; Oostra, Ben A.; Fu, Ying-Hui
PA Baylor College of Medicine, USA
SO U.S., 38 pp., Cont.-in-part of U.S. Ser. No. 705,490.
CODEN: USXXAM
DT Patent
LA English
FAN.CNT 2

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI US 6180337	B1	20010130	US 1991-751891	19910829
US 6107025	A	20000822	US 1991-705490	19910524
<-- WO 9220825	A1	19921126	WO 1992-US4447	19920522
<-- W: AU, CA, JP RM: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LU, MC, NL, SE AU 9221854	A1	19921230	AU 1992-21854	19920522
<-- PRAI US 1991-705490	A2	19910524		
US 1991-751891	A	19910829		
WO 1992-US4447	A	19920522		
AB A sequence of the FMR-1 gene is disclosed. This sequence and related probes, cosmids and unique repeats are used to detect X-linked diseases and especially the fragile X syndrome. Also, methods using methylation-sensitive restriction endonuclease and PCR primer probes were used to detect X-linked disease by measuring cGG repeats and the methylation associated with CpG island.				
IT 1239-45-8, Ethidium bromide				
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses) (staining of PCR products; diagnosis of the fragile X syndrome using the FMR-1 gene sequence and methylation-sensitive restriction endonuclease and PCR primer probes)				
RN 1239-45-8 CAPLUS				
CN Phenanthridinium, 3,8-diamino-5-ethyl-6-phenyl-, bromide (8CI, 9CI) (CA INDEX NAME)				

L16 ANSWER 22 OF 8218 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

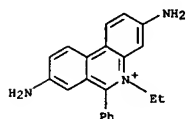
RE.CNT 9 THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L16 ANSWER 23 OF 8218 CAPLUS COPYRIGHT 2005 ACS on STN

AN 2001:43456 CAPLUS
DN 134:111207
TI Monitoring hybridization of DNA during PCR using rapid thermal cycling and double-strand DNA-specific fluorescent dyes
IN Wittwer, Carl T.; Ririe, Kirk M.; Rasmussen, Randy P.
PA University of Utah Research Foundation, USA
SO U.S., 95 pp., Cont.-in-part of U.S. Ser. No. 818,267.
CODEN: USXXAM
DT Patent
LA English
FAN.CNT 4

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI US 6174670	B1	20010116	US 1997-869276	19970604
CA 2257109	AA	19971211	CA 1997-2257109	19970604
<-- EP 1033411	A2	20000906	EP 1999-203548	19970604
<-- EP 1033411	A3	20001011		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
NZ 502323	A	20010928	NZ 1997-502323	19970604
EP 1179600	A1	20020213	EP 2001-203467	19970604
EP 1179600	B1	20050511		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
EP 1442794	A2	20040804	EP 2003-25810	19970604
EP 1442794	A3	20050511		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
EP 1493826	A1	20050105	EP 2004-22352	19970604
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
AT 295427	E	20050515	AT 2001-203467	19970604
US 5935522	A	19990910	US 1997-885625	19970630
<-- US 2001007759	A1	20010712	US 1998-132156	19980811
US 6787338	B2	20040907		
KR 2000015939	A	20000315	KR 1998-709495	19981124
<-- US 6245514	B1	20010612	US 1999-398629	19990917
US 623079	B1	20010515	US 2000-635344	20000809
US 2002058258	A1	20020516	US 2001-799160	20010305
US 6569627	B2	20030527		
US 2004002098	A1	20040101	US 2003-397759	20030326
US 2005032198	A1	20050210	US 2004-843075	20040511
US 2004265892	A1	20041230	US 2004-891161	20040713
US 2005064582	A1	20050324	US 2004-914648	20040809
PRAI US 1996-658993	B2	19960604		
US 1997-818267	A2	19970317		
US 1990-534029	B2	19900604		
US 1992-815966	B2	19920102		
US 1994-179969	A2	19940110		
US 1995-381703	B1	19950131		
US 1995-537612	A1	19951002		
EP 1997-929833	A3	19970604		
EP 1997-931089	A3	19970604		
EP 2003-25810	A3	19970604		
NZ 1997-333136	A1	19970604		

L16 ANSWER 23 OF 8218 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)
 US 1997-869275 A3 19970604
 US 1997-869276 A3 19970604
 US 1998-132156 A1 19980811
 US 2000-631339 A1 20000803
 US 2000-635344 A1 20000809
 US 2001-799160 A1 20010305
 AB Methods of monitoring hybridization during polymerase chain reaction are disclosed. These methods are achieved with rapid thermal cycling and use of double-stranded DNA dyes or specific hybridization probes. A fluorescence resonance energy transfer pair comprises fluorescein and Cy5 or Cy5.5. Methods for quantitating amplified DNA and determining its purity are carried out by anal. of melting and reannealing curves. Using the methods described and depending on the number of initial template copies present, product identification and quantification can be achieved in 5-20 min after temperature cycling has begun. Single-color fluorescent methods are used to monitor product purity, relative quantitation by multiplex PCR or competitive PCR, absolute product quantification by reannealing kinetics, and an improved method for initial template quantification by fluorescence vs. cycle number plots. The present invention also provides dual-color, sequence-specific methods for sequence variation detection, relative quantitation by multiplex PCR or competitive PCR, product quantitation by probe annealing kinetics, and initial template quantification by fluorescence vs. cycle number plots.
 IT 1239-45-8, Ethidium bromide
 RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses) (double-stranded DNA-binding fluorescent dye; monitoring hybridization of DNA during PCR using rapid thermal cycling and double-strand DNA-specific fluorescent dyes)
 RN 1239-45-8 CAPLUS
 CN Phenanthridinium, 3,8-diamino-5-ethyl-6-phenyl-, bromide (8CI, 9CI) (CA INDEX NAME)



• Br⁻

RE.CNT 150 THERE ARE 150 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L16 ANSWER 24 OF 8218 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 2001:27419 CAPLUS
 DN 134:9540
 TI Methods using calcium antagonists, calmodulin inhibitors, phospholipase C inhibitors, and NF-κB inhibitors for preventing multidrug resistance in cancer cells
 IN Shtil, Alexander A.; Roninson, Igor B.
 PA Board of Trustees of University of Illinois, USA
 SO U.S., 57 pp., Cont.-in-part of U.S. Ser. No. 370,724.
 CODEN: USXXAM
 DT Patent
 LA English
 FAN.CNT 4

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 6171786	B1	20010109	US 1996-659877	19960607
US 5972598	A	19991026	US 1995-370724	19950110
WO 9625949	A1	19960829	WO 1996-US422	19960111

W: CA, JP
 RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE
 PRAI US 1992-947659 B2 19920917
 US 1995-370724 A2 19950110
 WO 1996-US422 A2 19960111

AB Methods are provided for preventing the emergence of multidrug resistance in tumor cells during cancer chemotherapy. In particular, the invention discloses the use of cytoplasmic calcium antagonists and calmodulin inhibitors, phosphoinositide-dependent phospholipase C inhibitors, and substances that inhibit activation of the transcription factor NF-κB to prevent the induction of expression of the multidrug resistance gene (MDR1) encoding P-glycoprotein by chemotherapeutic drugs. MDR1 expression, which results in tumor cell resistance to subsequent treatment

with certain chemotherapeutic drugs, is shown herein to be induced in response to treatment with various cytotoxic agents, including such agents

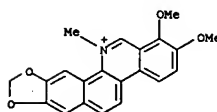
that are or are not substrates for P-glycoprotein-mediated efflux from cancer cells. Cytoplasmic calcium antagonists and calmodulin inhibitors, phosphoinositide-dependent phospholipase C inhibitors, and substances that inhibit activation of the transcription factor NF-κB are shown herein to suppress this cellular response. The invention also provides methods for identifying cytoplasmic calcium antagonists and calmodulin inhibitors, phosphoinositide-dependent phospholipase C inhibitors, and substances that inhibit activation of the transcription factor NF-κB that suppress induction of MDR1 gene expression by cytotoxic drugs.

Thus, the invention provides useful methods and reagents for preventing the emergence of multidrug resistance in tumor cells treated with cytotoxic and chemotherapeutic drugs in cancer patients undergoing chemotherapy, when cytoplasmic calcium antagonists and calmodulin inhibitors, phosphoinositide-dependent phospholipase C inhibitors, and substances that inhibit activation of the transcription factor NF-κB are administered prior to or simultaneously with cytotoxic drug treatment in such individuals.

IT 34316-15-9, Chelerythrine
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study) (calcium antagonists, calmodulin inhibitors, phospholipase C inhibitors, and NF-κB inhibitors for preventing multidrug

L16 ANSWER 23 OF 8218 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

L16 ANSWER 24 OF 8218 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)
 RN 34316-15-9 CAPLUS
 CN [1,3]Benzodioxolo[5,6-c]phenanthridinium, 1,2-dimethoxy-12-methyl- (9CI) (CA INDEX NAME)

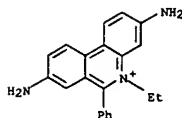


RE.CNT 17 THERE ARE 17 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L16 ANSWER 25 OF 8218 CAPLUS COPYRIGHT 2005 ACS ON STN
 AN 2000:821565 CAPLUS
 DN 133:331799
 TI Methods for characterizing polymer molecules or the like using microscopy and spectroscopy and medium-based sizing
 IN Schwatt, David
 PA New York University, USA
 SO U.S., 54 pp., Cont.-in-part of U. S. Ser. No. 244,897.
 CODEN: USXXAM
 DT Patent
 LA English
 FAN.CNT 7

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI US 6150089	A	20001121	US 1993-128996	19930930
<-- US 5405519	A	19950411	US 1992-879551	19920504
<-- CA 2173156	AA	19950413	CA 1994-2173156	19940929
<-- WO 9510034	A2	19950413	WO 1994-US11037	19940929
<-- WO 9510034	A3	19950608		
W: AU, CA, JP RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE EP 722566	A1	19960724	EP 1994-929381	19940929
<-- R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE				
JP 09503863	T2	19970415	JP 1994-510898	19940929
<-- AU 698688	B2	19981105	AU 1994-78461	19940929
<-- US 5720928	A	19980224	US 1995-415710	19950403
<-- US 6147198	A	20001114	US 1995-415839	19950403
US 6294136	B1	20010925	US 1997-855410	19970513
US 6509158	B1	20030121	US 2000-710824	20001113
US 6448012	B1	20020910	US 2000-713016	20001116
US 2003036067	A1	20030220	US 2001-962802	20010924
US 6610256	B2	20030826		
US 2002173045	A1	20021121	US 2002-132243	20020426
US 2003027201	A1	20030206	US 2002-238407	20020909
US 6713263	B2	20040330		
JP 2004065254	A2	20040304	JP 2003-185189	20030627
JP 3650617	B2	20050525		
US 1988-244897	B1	19880915		
US 1988-244897	B2	19880915		
US 1989-333531	B2	19890405		
US 1992-879551	A2	19920504		
US 1993-128996	A	19930930		
US 1993-162379	A2	19931207		
JP 1995-510898	A3	19940929		
WO 1994-US11037	W	19940929		
US 1995-415710	A1	19950403		
US 1995-415839	A3	19950403		

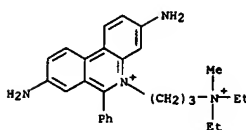
L16 ANSWER 25 OF 8218 CAPLUS COPYRIGHT 2005 ACS ON STN (Continued)



RE.CNT 21 THERE ARE 21 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L16 ANSWER 25 OF 8218 CAPLUS COPYRIGHT 2005 ACS ON STN (Continued)
 US 1997-855410 A1 19970513
 US 2000-713016 A3 20001116
 AB A method for observing and determining the size of individual mols. and for determining the weight distribution of a sample containing mols. of varying size, which involves placing a deformable or nondeformable mol. in a medium, subjecting the mol. to an external force, thereby causing conformational and/or positional changes, and then measuring these changes. Preferred ways to measure conformational and positional changes include: (1) determining the rate at which a deformable mol. returns to a relaxed state after termination of the external force, (2) determining the rate at which a mol. becomes oriented in a new direction when the direction of the perturbing force is changed, (3) determining the rate at which a mol. rotates, (4) measuring the length of a mol., particularly when it is at least partially stretched, or (5) measuring at least one diameter of a spherical or ellipsoidal mol. Measurements of relaxation, reorientation, and rotation rates, as well as length and diameter can be made using a light microscope connected to an image processor. Mol. relaxation, reorientation and rotation also can be determined using a microscope combined with a spectroscopic device. The invention is particularly useful for measuring polymer mols., such as nucleic acids, and can be used to determine the size and map location of restriction digests. Breakage of large polymer mols. mounted on a microscope slide is prevented by condensing the mols. before mounting and unfolding the mols. after they have been placed in a matrix. Yeast chromosomal DNA was resolved by pulsed electrophoresis using low melting agarose. The DNA was labeled with DAPI, subjected to controlled elongation, and reacted with restriction enzymes in the absence of Mg2+. Enzymic cleavage was triggered by addition of MgCl2. Cleavage sites were visualized using an image processor connected to a video camera.
 IT 1239-45-8, Ethidium bromide
 RI: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses) (methods for characterizing polymer mols. using microscopy and spectroscopy and medium-based sizing)
 RN 1239-45-8 CAPLUS
 CN Phenanthridinium, 3,8-diamino-5-ethyl-6-phenyl-, bromide (8CI, 9CI) (CA INDEX NAME)

L16 ANSWER 26 OF 8218 CAPLUS COPYRIGHT 2005 ACS ON STN
 AN 2000:816869 CAPLUS
 DN 134:127696
 TI Structure-functional effects of ethanol on Drosophila melanogaster acetylcholinesterase probed by kinetic studies with substrate and inhibitors
 AU Ortega, Florence; Garcia, Delphine; Marty, Jean-Louis
 CS Centre de Phytopharmacie, CNRS UA 461, Universite de Perpignan, Perpignan, 66860, Fr.
 SO Journal of Enzyme Inhibition (1999), 14(2), 125-149
 CODEN: ENINER; ISSN: 8755-5093
 PB Harwood Academic Publishers
 DT Journal
 LA English
 AB Ethanol is commonly used to extract and dissolve insecticides acting as inhibitors of acetylcholinesterase (EC 3.1.1.7). Here, expts. were undertaken to investigate the influence of solvent on the reaction and inhibition of the enzyme from Drosophila melanogaster. Ethanol (up to 20% by volume) is shown to induce a dramatic reduction of the affinity of acetylcholinesterase for the acetylthiocholine iodide substrate and all the edrophonium chloride, paraoxon Et and propidium diiodide inhibitors, with little influence on the rate consts. Taken together, these results point to a main perturbation of active-center related components involved in the formation and/or stability of Michaelis complexes. Inactivation and ligand-stabilization studies of acetylcholinesterase activity further indicate the occurrence of specific "conformational scrambling" at catalytic and regulatory sites. It is proposed that ethanol affects the enzyme reactivity by modifying the conformation of the aromatic gorge containing the active center and hence, interactions involved in the mol. recognition of substrates and ligands.
 IT 25535-16-4, Propidium diiodide
 RI: BSU (Biological study, unclassified); BIOL (Biological study) (structure-functional effects of ethanol on Drosophila melanogaster acetylcholinesterase probed by kinetic studies with substrate and inhibitors)
 RN 25535-16-4 CAPLUS
 CN Phenanthridinium, 3,8-diamino-5-[3-(diethylmethylammonio)propyl]-6-phenyl-, diiodide (8CI, 9CI) (CA INDEX NAME)

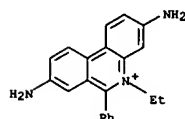


• 2 I -

RE.CNT 56 THERE ARE 56 CITED REFERENCES AVAILABLE FOR THIS RECORD

L16 ANSWER 26 OF 8218 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)
ALL CITATIONS AVAILABLE IN THE RE FORMAT

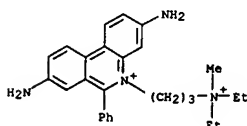
L16 ANSWER 27 OF 8218 CAPLUS COPYRIGHT 2005 ACS on STN
AN 2000:805167 CAPLUS
DN 135:118363
TI Ethidium dependence of the susceptibility of spermine-DNA complex to
DNase 1
AU Lee, Chan Yong; Maeng, Hack-Young; Ryu, Hyeon-Won; Ko, Thong-Sung
CS Department of Premedicine, Eulji Medical College, S. Korea
SO Chungnam Kwahak Yonguchi (1999), 26(1), 76-81
CODEN: CJOSDA
PB Chungnam National University, Research Institute of Basic Sciences
DT Journal
LA English
AB Ethidium-dependent DNA susceptibility to DNase 1 in the presence (3 x 104
M) and absence of spermine was studied, in order to assess the
feasibility
of using DNA susceptibility to DNase 1 as a probe of DNA structural
transition. The present study shows different binding features and
effect
of ethidium bromide on the DNA susceptibility to DNase 1 in the presence
and absence of spermine. These data may be useful for the probing
structural transition of DNA induced by spermine.
IT 1239-45-8, Ethidium bromide
RL: BPR (Biological process); BSU (Biological study, unclassified); BUU
(Biological use, unclassified); BIOL (Biological study); PROC (Process);
USES (Uses)
(ethidium dependence of the susceptibility of spermine-DNA complex to
DNase 1)
RN 1239-45-8 CAPLUS
CN Phenanthridinium, 3,8-diamino-5-ethyl-6-phenyl-, bromide (8CI, 9CI) (CA
INDEX NAME)



● Br⁻

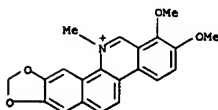
RE.CMT 10 THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L16 ANSWER 28 OF 8218 CAPLUS COPYRIGHT 2005 ACS on STN
AN 2000:805165 CAPLUS
DN 134:68018
TI A structural feature of the active site of acetylcholinesterase using
thiocholine ester substrates
AU Lee, Chun-Bae; Chu, Eun-Hui; Choi, Su-La; Sok, Dai-Eun; Myung, Pyung-Keun
CS Department of Biochemistry, Chungnam National University, Taejeon,
305-764,
S. Korea
SO Chungnam Kwahak Yonguchi (1999), 26(1), 62-69
CODEN: CJOSDA
PB Chungnam National University, Research Institute of Basic Sciences
DT Journal
LA Korean
AB The inhibition pattern of three inhibitors (tacrine, decamethonium, and
propidium) on the hydrolysis of various thiocholine ester substrates by
eel acetylcholinesterase was comparatively examined When the substrate
was
acetylthiocholine, it showed a similar competitive inhibition by tacrine
inhibitor, and a mixed type inhibition by decamethonium and propidium
inhibitors. When the substrate was pentanoylthiocholine, it showed an
uncompetitive inhibition by tacrine, and a noncompetitive inhibition by
decamethonium. When the substrate was laurylthiocholine, it showed mixed
type and uncompetitive inhibition by tacrine. and a competitive
inhibition
by decamethonium and propidium. Those results suggest that the active
site of acetylcholinesterase has the existence of hydrophobic site
besides
the anionic and esteratic site.
IT 36015-30-2, Propidium
RL: BAC (Biological activity or effector, except adverse); BSU
(Biological
study, unclassified); BIOL (Biological study)
(structural feature of active site of acetylcholinesterase using
thiocholine ester substrates)
RN 36015-30-2 CAPLUS
CN Phenanthridinium,
3,8-diamino-5-[3-(diethylmethylammonio)propyl]-6-phenyl-
(9CI) (CA INDEX NAME)



L16 ANSWER 29 OF 8218 CAPLUS COPYRIGHT 2005 ACS on STN
AN 2000:755410 CAPLUS
DN 133:286455
TI Sanguiridine salve as wound-healing agent
IN Bykov, V. A.; Vichkanova, S. A.; Rebrova, G. A.; Kolchir, V. K.;
Krutikova, N. M.; Vasilevskii, V. K.
PA Vserossiiskii Nauchno-Issledovatel'skii Institut Lekarsvennykh i
Aromaticheskikh Rastenii, Russia
SO Russ.
From: Izobreteniya 1999, (36), 79-80.
CODEN: RUXKE7
DT Patent
LA Russian
FAN.CMT 1
PATENT NO. KIND DATE APPLICATION NO. DATE

PI RU 2143260 C1 19991227 RU 1998-121651 19981124
--
FRAI RU 1998-121651 19981124
AB Title only translated.
IT 39404-28-9, Sanguiridine
RL: PEP (Physical, engineering or chemical process); THU (Therapeutic
use); BIOL (Biological study); PROC (Process); USES (Uses)
(sanguiridine salve as wound-healing agent)
RN 39404-28-9 CAPLUS
CN [1,3]Benzodioxolo[5,6-c]-1,3-dioxolo[4,5-1]phenanthridinium, 13-methyl-
sulfate (1:1), mixt. with 1,2-dimethoxy-12-methyl[1,3]benzodioxolo[5,6-
c]phenanthridinium sulfate (1:1) (9CI) (CA INDEX NAME)
CH 1
CRN 53144-45-9
CMF C21 H18 N O4 . H O4 S
CH 2
CRN 34316-13-9
CMF C21 H18 N O4



CH 3
CRN 14996-02-2
CMF H O4 S

L16 ANSWER 29 OF 8218 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



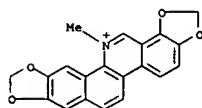
CM 4

CRN 22331-93-7
CMF C20 H14 N O4 . H O4 S

CM 5

CRN 14996-02-2
CMF H O4 S

CM 6

CRN 2447-54-3
CMF C20 H14 N O4

L16 ANSWER 30 OF 8218 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

Viscose or wool.

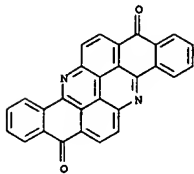
IT 475-71-8, Flavanthrone 3271-76-9, Vat Green 3

RL: TEM (Technical or engineered material use); USES (Uses)

(enzymic-mediated fabric dyeing with reduced vat and sulfur dyes in an insolubilizing step on fabric)

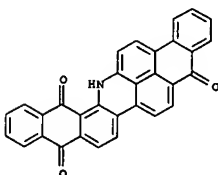
RN 475-71-8 CAPLUS

CN Benzo[h]benz[5,6]acridino[2,1,9,8-klmma]acridine-8,16-dione (9CI) (CA INDEX NAME)



RN 3271-76-9 CAPLUS

CN Anthra[2,1,9-mna]naphth[2,3-h]acridine-5,10,15(16H)-trione (6CI, 7CI, 8CI, 9CI) (CA INDEX NAME)

RE.CNT 19 THERE ARE 19 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L16 ANSWER 30 OF 8218 CAPLUS COPYRIGHT 2005 ACS on STN

AN 2000:716064 CAPLUS

DN 133:282970

TI Enzymatic fabric dyeing with reduced vat and sulfur dyes

IN Xu, Feng; Salmon, Sonja; Deussen, Heinz-Josef Wilhelm; Lund, Henrik

PA Novo Nordisk Biotech, Inc., USA

SO U.S., 21 pp., Cont.-in-part of U.S. 5,948,122.

CODEN: USXXAM

DT Patent

LA English

FAN.CNT 3

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI US 6129769	A	20001010	US 1999-382267	19990824
<-- US 5948122	A	19990907	US 1998-199222	19981124
<-- CA 2351468	AA	20000602	CA 1999-2351468	19991118
<-- WO 2000031333	A2	20000602	WO 1999-US27609	19991118

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000031333	A3	20000908		
W: AE, AL, AU, BA, BB, BG, BR, CA, CN, CU, CZ, EE, GD, GE, HR, HU, ID, IL, IN, IS, JP, KP, KR, LC, LK, LR, LT, LV, MG, MK, MN, MX, NO, NZ, PL, RO, SG, SI, SK, SL, TR, TT, UA, UZ, VN, YU, ZA, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
AU 2000016311	A5	20000613	AU 2000-16311	19991118

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
BR 9915593	A	20011106	BR 1999-15593	19991118
EP 1153166	A2	20011114	EP 1999-959060	19991118
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
TR 200101475	T2	20011221	TR 2001-200101475	19991118
JP 2002530545	T2	20020917	JP 2000-584133	19991118

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PRAI US 1998-199222	A2	19981124		
US 1999-382267	A	19990824		
WO 1999-US27609	N	19991118		

AB Dyeing a fabric (or other material) comprises (a) treating the material with one or more enzymes of an oxidation system which comprises (i) an oxygen

source and one or more enzymes exhibiting oxidase activity selected from the group consisting of bilirubin oxidase, catechol oxidase, laccase, o-aminophenol oxidase, polyphenol oxidase, ascorbate oxidase, and ceruloplasmin, or (ii) a hydrogen peroxide source and one or more enzymes exhibiting peroxidase activity which is a peroxidase or haloperoxidase; (b) treating the fabric in a bath of 21 reduced vat dyes and/or 21 reduced S dyes, and (c) oxidizing the 21 reduced vat dyes or 21 reduced S dyes adsorbed onto the treated fabric with an oxidation system comprising (i) an O source or (ii) a H2O2 source to convert

the 21 reduced dyes to their original oxidized insol. colored forms; where the material is a fabric, yarn, fiber, garment or film made of cotton, diacetate, flax, fur, hide, leather, linen, Lyocell, polyacrylic, polyamide, polyester, ramie, rayon, silk, Tencel, triacetate,

L16 ANSWER 31 OF 8218 CAPLUS COPYRIGHT 2005 ACS on STN

AN 2000:710994 CAPLUS

DN 133:242580

TI Method of preparing sanguiritrine from Macleaya microcarpa or M. cordata

IN Savina, A. A.; Tolachev, O. N.; Glyzin, V. I.; Bykov, V. A.; Stikhin, V. A.; Sheichenko, V. I.; Kopylova, I. E.; Lasskaya, O. F.; Gromakova, A. I.

PA Vserossiiskii Nauchno-Issledovatel'skii Institut Lekarsvennykh i

Aromaticheskikh Rastenii, Russia

SO Russ.

From: Izobreteniya 1999, (33), 118.

CODEN: RUXKE7

DT Patent

LA Russian

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI RU 2141837	C1	19991127	RU 1997-108032	19970519

<-- RU 1997-108032 19970519

PRAI Title only translated.

IT 39404-28-99, Sanguiritrine

RL: BFN (Biosynthetic preparation); THU (Therapeutic use); BIOL

(Biological study); PREP (Preparation); USES (Uses)

(preparing sanguiritrine from Macleaya microcarpa or M. cordata)

RN 39404-28-9 CAPLUS

CN [1,3]Benzodioxolo[5,6-c]-1,3-dioxolo[4,5-i]phenanthridinium, 13-methyl-, sulfate (1:1), mixt. with 1,2-dimethoxy-12-methyl[1,3]benzodioxolo[5,6-c]phenanthridinium sulfate (1:1) (9CI) (CA INDEX NAME)

CM 1

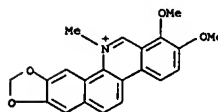
CRN 53144-45-9

CMF C21 H18 N O4 . H O4 S

CM 2

CRN 34316-15-9

CMF C21 H18 N O4



CM 3

CRN 14996-02-2

CMF H O4 S

L16 ANSWER 31 OF 8218 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



CM 4

CRN 22331-93-7

CMF C20 H14 N O4 . H O4 S

CM 5

CRN 14996-02-2

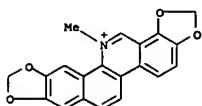
CMF H O4 S



CM 6

CRN 2447-54-3

CMF C20 H14 N O4



L16 ANSWER 33 OF 8218 CAPLUS COPYRIGHT 2005 ACS on STN

AN 2000:658496 CAPLUS

DN 133:232874

TI Di-N-heterocyclic compounds, methods and compositions for inhibiting PARP activity, and therapeutic use

IN Jackson, Paul F.; MacLin, Keith M.; Zhang, Jie

PA Guilford Pharmaceuticals, Inc., USA

SO U.S., 44 pp., Cont.-in-part of U.S. Ser. No. 79,510, abandoned.

CODEN: USXGAM

DT Patent

LA English

FAN.CNT 17

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 6121278	A	20000919	US 1998-145185	19980901
WO 9911644	A1	19990311	WO 1998-US18188	19980902

W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZW, AM, AZ, BY, BG, KZ, MD, RU, TJ, TM, RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

AU 9892981 A1 19990322 AU 1998-92981 19980902

PRAI US 1997-922520 A2 19970903

US 1998-79510 B2 19980515

US 1998-79511 A 19980515

US 1998-145185 A 19980901

WO 1998-US18188 W 19980902

OS MARPAT 133:232874

GI



I

AB The invention provides I (Y = atoms necessary to form fused 5- to 6-membered, aromatic or non-aromatic, heterocyclic ring containing ≥1 N in

1,3-relationship with N shown; Y may be unsubstituted or substituted with ≥1 alkyl, alkenyl, cycloalkenyl, cycloalkenyl, aralkyl, aryl, etc.), or pharmaceutically acceptable salts, hydrates, esters, solvates, prodrugs, metabolites, stereoisomers, or mixts. thereof, for inhibiting poly(ADP-ribose)polymerase (PARP) activity and treating a variety of diseases.

IT 1015-89-0, 6(5H)-Phenanthridinone 2178-32-7, Benzo[b]phenanthridin-5(6H)-one 22860-48-6 27353-44-2 27353-48-6 78256-30-1

RL: BAC (Biological activity or effector, except adverse); BSU (Biological

L16 ANSWER 32 OF 8218 CAPLUS COPYRIGHT 2005 ACS on STN

AN 2000:670957 CAPLUS

DN 134:26185

TI Reversion mutation of dark variants and it's application in gene toxicant monitoring by fiber-optic biosensor technique

AU Sun, Yaliang; Li, Guangdong; Guo, Jianli

CS Chemistry Department of Basic Medicine College, Tongji Medical University,

Wuhan, 430030, Peop. Rep. China

SO Chemical Sensors, Technical Digest of the International Meeting, 7th, Beijing, China, July 27-30, 1998 (1998), 208-210 Publisher:

International Academic Publishers, Beijing, Peop. Rep. China.

CODEN: 69AJWI

DT Conference

LA English

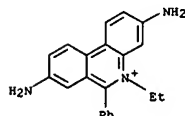
AB The luminous intensity of dark variant(S1) separated from Photobacterium phosphoreum(A2) is 1/10000 less than that of wild-type. Any mutation of lux gene and a change in regulation will influence the luminous level of dark variant, even lead to creation of stable revertants. Ethidium Bromide (EB) (0.6 µg/mL), Mitomycin C(MC) (0.05 µg/mL), 2-amino fluorene(ZAF) (1.0 µg/mL) can all strongly induce reversion mutation for S1 in 24h and increase reversion rate significantly. Also these revertants have stable genetic character. The mutation may take place at gene level or in DNA translation process. The authors have studied the mutagenesis of pollutants in environment by using S1 and compared with Ames Test. The pos. rate is identical with Ames Test.

IT 1239-45-8, Ethidium bromide

RL: ADV (Adverse effect, including toxicity); BIOL (Biological study) (pollutant genotoxicity (mutation) anal. in relation to reversion mutation of dark variants and it's application in gene toxicant monitoring by fiber-optic biosensor technique)

RN 1239-45-8 CAPLUS

CN Phenanthridinium, 3,8-diamino-5-ethyl-6-phenyl-, bromide (8CI, 9CI) (CA INDEX NAME)

Br⁻

RE.CNT 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L16 ANSWER 33 OF 8218 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

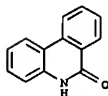
study, unclassified); THU (Therapeutic use); BIOL (Biological study);

USES

(Uses)
(di-N-heterocyclic compds., methods and compns. for inhibiting PARP activity, and therapeutic use)

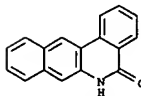
RN 1015-89-0 CAPLUS

CN 6(5H)-Phenanthridinone (6CI, 7CI, 8CI, 9CI) (CA INDEX NAME)



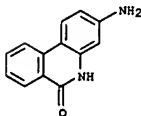
RN 2178-32-7 CAPLUS

CN Benzo[b]phenanthridin-5(6H)-one (7CI, 8CI, 9CI) (CA INDEX NAME)



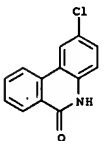
RN 22860-48-6 CAPLUS

CN 6(5H)-Phenanthridinone, 3-amino- (7CI, 8CI, 9CI) (CA INDEX NAME)

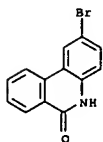


RN 27353-44-2 CAPLUS

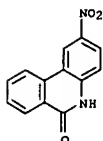
CN 6(5H)-Phenanthridinone, 2-chloro- (6CI, 8CI, 9CI) (CA INDEX NAME)



L16 ANSWER 33 OF 8218 CAPLUS COPYRIGHT 2005 ACS ON STN (Continued)
 RN 27353-48-6 CAPLUS
 CN 6(5H)-Phenanthridinone, 2-bromo- (6CI, 7CI, 8CI, 9CI) (CA INDEX NAME)



RN 78256-30-1 CAPLUS
 CN 6(5H)-Phenanthridinone, 2-nitro- (6CI, 9CI) (CA INDEX NAME)



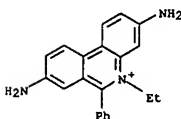
RE.CNT 52 THERE ARE 52 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L16 ANSWER 34 OF 8218 CAPLUS COPYRIGHT 2005 ACS ON STN
 AN 2000:639143 CAPLUS
 DN 133:233551
 TI Hairpin-forming primers with molecular energy transfer labels and nucleic acid amplification methods based thereon
 IN Nazarenko, Irina A.; Bhatnagar, Satish K.; Winn-deen, Emily S.; Hohman, Robert J.
 PA InterGen Company, USA
 SO U.S., 83 pp., Cont.-in-part of U.S. 5,866,336.
 CODEN: USXXAM
 DT Patent
 LA English
 FAN.CNT 4

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 6117635	A	20000912	US 1997-837034	19970411
US 5866336	A	19990202	US 1997-778487	19970103
US 6090552	A	20000718	US 1997-891516	19970711
CA 2260973	AA	19980122	CA 1997-2260973	19970715
CA 2260973	C	20030318		
WO 9802449	A1	19980122	WO 1997-US12315	19970715

W: AL, AM, AU, AZ, BA, BB, BG, BR, BY, CA, CN, CU, CZ, EE, GE, GH, HU, IL, IS, JP, KG, KP, KR, KZ, LC, LK, LR, LT, LV, MD, MG, MK, MN, MX, NO, NZ, PL, RO, RU, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UZ, VN, YU, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, RW: GH, KE, LS, MW, SD, SE, UG, ZW, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG
 AU 9737285 A1 19980209 AU 1997-37285 19970715
 EP 912597 A1 19990506 EP 1997-934163 19970715
 EP 912597 B1 20050928
 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI
 JP 2001513623 T2 20010904 JP 1998-506248 19970715
 JP 3597869 B2 20041208
 JP 2003111599 A2 20030415 JP 2002-232310 19970715
 PRAI US 1996-683667 B2 19960716
 US 1997-778487 A2 19970103
 US 1997-837034 A2 19970411
 JP 1998-506248 A3 19970715
 WO 1997-US12315 W 19970715
 AB Hairpin-forming nucleic acid amplification primers labeled with donor and acceptor moieties of mol. energy transfer pairs are disclosed. The moieties can be fluorophores, such that fluorescent energy emitted by the donor is absorbed by the acceptor. The acceptor may be a fluorophore that fluoresces at a wavelength different from the donor moiety, or it may be a quencher. The invention also provides methods and kits for directly detecting amplification products employing the nucleic acid amplification

L16 ANSWER 34 OF 8218 CAPLUS COPYRIGHT 2005 ACS ON STN (Continued)
 primers. Using these primers, there is no need for sepn. of unincorporated primers. This "closed-tube" format greatly reduces the possibility of carryover contamination with amplification products, provides for high throughput of samples, and may be totally automated. Thus, hairpin-forming primers labeled with both fluorescein and DASCYL were used in a no. of expts., i.e., detection of PCR amplified prostate-specific antigen cDNA, anal. of methylation status of CpG islands, detection of Chlamydia genomic DNA and P16 gene, in a TRAP (telomeric repeat amplification protocol) assay for detection of telomerase-pos. cells, in an ARMS (amplification refractory mutation system) assay to detect a mutation in the β -3-adrenergic receptor gene, and in an in situ PCR assay for the gag region of HIV-1.
 IT 3546-21-2D, Ethidium, doubly-labeled primers containing
 RL: ARU (Analytical role, unclassified); BOC (Biological occurrence); BSU (Biological study, unclassified); ANST (Analytical study); BIOL (Biological study); OCCU (Occurrence)
 (hairpin-forming primers with mol. energy transfer labels and nucleic acid amplification methods based thereon)
 RN 3546-21-2 CAPLUS
 CN Phenanthridinium, 3,8-diamino-5-ethyl-6-phenyl- (8CI, 9CI) (CA INDEX NAME)



RE.CNT 94 THERE ARE 94 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

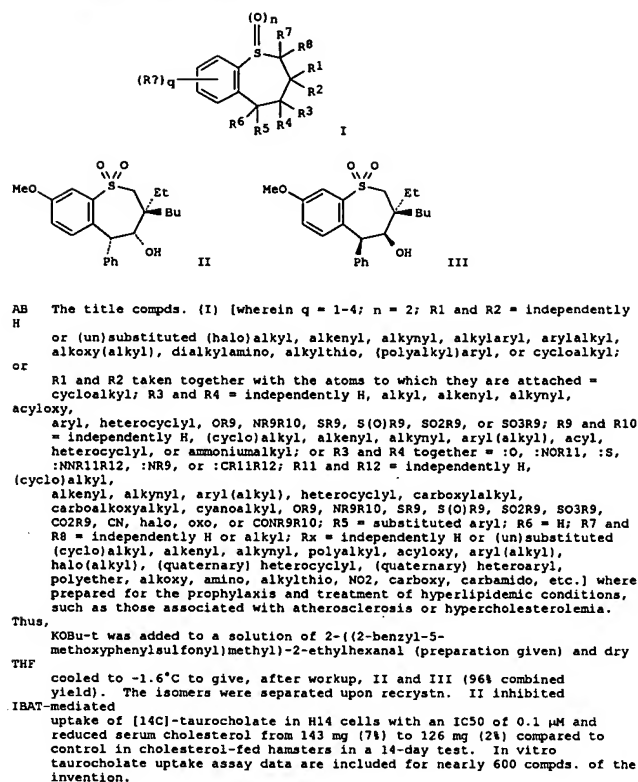
L16 ANSWER 35 OF 8218 CAPLUS COPYRIGHT 2005 ACS ON STN
 AN 2000:590035 CAPLUS
 DN 133:193069
 TI Preparation of substituted 5-aryl-benzothiepinines as ileal bile acid transport and taurocholate uptake inhibitors
 IN Lee, Len F.; Banerjee, Shyamal C.; Huang, Horng-chih; Li, Jinglin J.; Miller, Raymond E.; Reitz, David B.; Tremont, Samuel J.
 PA G.D. Searle and Co., USA
 SO U.S., 191 pp., Cont.-in-part of U. S. Ser. No. 109,551.
 CODEN: USXXAM
 DT Patent
 LA English
 FAN.CNT 9

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 6107494	A	20000822	US 1999-275463	19990324
CA 2506703	AA	19970918	CA 1997-2506703	19970311
EP 1440972	A1	20040728	EP 2004-10088	19970311
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, PT, IE,				
US 5994391	A	19991130	US 1998-109551	19980702
EP 1331225	A1	20030730	EP 2003-5459	19981216
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, PT, IE,				
CA 2336315	AA	20000113	CA 1999-2336315	19990629
WO 2000001687	A1	20000113	WO 1999-US12828	19990629

W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, RW: GH, GM, KE, LS, MW, SD, SI, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
 AU 9948202 A1 20000124 AU 1999-48202 19990629
 AU 766957 B2 20031030
 EP 1091953 A1 20010418 EP 1999-931769 19990629
 EP 1091953 B1 20031210
 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO
 TR 200100824 T2 20010723 TR 2001-200100824 19990629
 BR 9911737 A 20011211 BR 1999-11737 19990629
 EE 200100002 A 20020617 EE 2001-2 19990629
 JP 2002519418 T2 20020702 JP 2000-558091 19990629
 NZ 509621 A 20030829 NZ 1999-509621 19990629
 AT 236122 T 20031215 AT 1999-931769 19990629
 PT 091953 T 20040430 PT 1999-931769 19990629
 ES 2213373 E 20040816 ES 1999-931769 19990629
 EP 1466911 A2 20041013 EP 2003-26649 19990629
 EP 1466911 A3 20050907
 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL
 SG 108309 A1 20050128 SG 2002-200207701 19990629
 US 6262277 B1 20010717 US 1999-443403 19991119

L16	ANSWER 35 OF 8218	CAPLUS	COPYRIGHT 2005 ACS on STN	(Continued)
AU	761249	B2	20030529	AU 2000-53394
NO	2001000016	A	20010302	NO 2001-16
ZA	2001000028	A	20010725	ZA 2001-28
HR	2001000004	A1	20011231	HR 2001-4
BG	105206	A	20010928	BG 2001-105206
US	2002013476	A1	20020131	US 2001-828968
US	6387924	B2	20020514	
US	2002188119	A1	20021212	US 2002-72600
US	6875877	B2	20050405	
US	2003171426	A1	20030911	US 2002-76091
US	6642268	B2	20031104	
JP	2004203891	A2	20040722	JP 2004-50473
US	2004204478	A1	20041014	US 2004-830125
JP	2004359694	A2	20041224	JP 2004-227034
US	1994-305526	B2	19940913	
US	1995-517051	B1	19950821	
US	1996-13119P	P	19960311	
US	1997-816065	B2	19970311	
US	1997-831284	B2	19970311	
US	1997-68170P	P	19971219	
US	1998-109551	A2	19980702	
AU	1997-23266	A3	19970311	
CA	1997-2248586	A3	19970311	
EP	1997-915976	A3	19970311	
US	1997-40660P	P	19970311	
EP	1998-962044	A3	19981216	
US	1999-275463	A1	19990324	
EP	1999-931769	A3	19990629	
JP	2000-558091	A3	19990629	
WO	1999-US12828	W	19990629	
US	1999-443403	A1	19991119	
US	2000-676466	A3	20000929	
US	2000-581897	A3	20001002	
US	2001-828968	A3	20010409	
US	2002-68297	A3	20020208	
OS	MARPAT 133:193089			
GI				

L16 ANSWER 35 OF 8218 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



L16 ANSWER 35 OF 8218 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

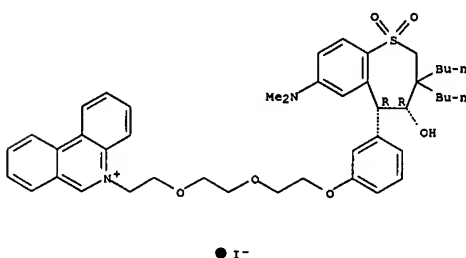
IT 197374-29-19

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (hypolipemic agent; preparation of substituted 5-aryl-benzothiepin-5-yl)cyclization of 2-((2-benzyl- and 2-benzoylphenylthio)methyl)alkanals as ileal bile acid transport and taurocholate uptake inhibitors)

RN 197374-29-1 CAPLUS

CN Phenanthridinium, 5-[2-[[2-[3-[(4R,5R)-3,3-dibutyl-7-(dimethylamino)-2,3,4,5-tetrahydro-4-hydroxy-1,1-dioxido-1-benzothiepin-5-yl]phenoxy]ethoxy]ethoxy]ethyl]-, iodide, rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.



RE.CNT 56 THERE ARE 56 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L16 ANSWER 36 OF 8218 CAPLUS COPYRIGHT 2005 ACS on STN

AN 2000:567098 CAPLUS

DN 134:128147

TI A simple method for cell isolation from paraffin-embedded tissue specimens for flow cytometric DNA analysis

AU Oga, Atsunori; Ohzono, Yuko; Yoshizawa, Hiroto; Sasaki, Kohsuke.

CS Department of Pathology, Yamaguchi University School of Medicine, Yamaguchi, 755-8505, Japan

SO Bulletin of the Yamaguchi Medical School (1999), 46(3-4), 99-104

CODEN: BYMSAN; ISSN: 0513-1812

PB Yamaguchi University, School of Medicine

DT Journal

LA English

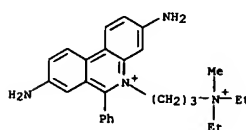
AB Since Hedley et al. developed a cell isolation method using pepsin from a paraffin-embedded material, many archival tissues have been analyzed by flow cytometry. The original and modified methods have greatly contributed to DNA ploidy and cell cycle analyses, in particular, to retrospective studies. However, the methods need repetitive centrifugations and/or long incubation time. For saving time and efforts we aimed to improve the Hedley's method. Tissues used were normal lymph nodes and malignant lymphoma of testis. All cell isolation procedures were done in a 1.5-mL microfuge tube without centrifugation. Tissue sections were minced with scissors, deparaffinized and rehydrated. Subsequently, the tissue was treated with 0.1% pepsin in 0.1N HCl for 90 min at 37° and neutralized. After filtering out cell debris, the cell suspension was treated with 0.1% RNase and stained with propidium iodide. The average coefficient of variation for G0/G1 peak of DNA diploid cells was 2.6%, and it was small enough to detect a near diploid DNA aneuploid peak (DNA index: 1.13). All procedures can be completed within 4 h without difficulty. This method is suitable for lymphocytic tissues.

IT 25535-16-4, Propidium iodide

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses) (a simple method for cell isolation from paraffin-embedded tissue specimens for flow cytometric DNA anal.)

RN 25535-16-4 CAPLUS

CN Phenanthridinium, 3,8-diamino-5-[3-(diethylmethylammonio)propyl]-6-phenyl-, diiodide (8CI, 9CI) (CA INDEX NAME)



RE.CNT 13 THERE ARE 13 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L16 ANSWER 36 OF 8218 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

L16 ANSWER 37 OF 8218 CAPLUS COPYRIGHT 2005 ACS on STN

AN 2000:548928 CAPLUS

DN 133:117579

TI Plant transformation method

IN Pashchenko, V. M.

PA Ryazanskaya Sel'sko-Khozyaystvennaya Akademiya, im. prof. P. A. Kostycheva, Russia

SO Russ.

From: Izobreteniya 1999, (10), 316.

CODEN: RUXKE7

DT Patent

LA Russian

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	RU 2128427	C1	19990410	RU 1996-120570	19961010

PRAI RU 1996-120570 19961010

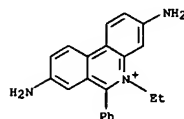
AB Title only translated.

IT 1239-45-8, Ethidium bromide

RL: AGR (Agricultural use); BIOL (Biological study); USES (Uses)
(plant transformation method)

RN 1239-45-8 CAPLUS

CN Phenanthridinium, 3,8-diamino-5-ethyl-6-phenyl-, bromide (8CI, 9CI) (CA INDEX NAME)

● Br⁻

L16 ANSWER 38 OF 8218 CAPLUS COPYRIGHT 2005 ACS on STN

AN 2000:547406 CAPLUS

DN 133:132120

TI Method for the enumeration of micronucleated erythrocyte populations with

a single laser flow cytometer

IN Dertinger, Stephen D.; Torous, Dorothea K.; Tometsko, Kenneth R.

PA Litron Laboratories Limited, USA

SO U.S., 19 pp., Cont.-in-part of U.S. 5,858,667.

CODEN: USXXAM

DT Patent

LA English

FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 6100038	A	20000808	US 1999-228329	19990111

PRAI US 1996-706680 A2 19960906

AB A single laser flow cytometric method for the enumeration of micronuclei in erythrocyte populations, wherein a sample of peripheral blood or bone marrow is obtained and the cell populations in the sample are fixed. Reticulocytes in the fixed samples are treated simultaneously with RNase and with a fluorescent labeled antibody having binding specificity for a surface marker for erythroblasts/reticulocytes. The erythrocyte populations are then stained with a nucleic acid stain which stains DNA representing micronuclei, if present. The stained and/or labeled erythrocyte populations are then exposed to a laser beam of appropriate excitation wavelength for both the nucleic acid staining dye and the fluorescent label to produce fluorescent emission. The fluorescent emission and light scatter produced by the erythrocyte populations are detected by the flow cytometer from which is calculated the number of

specific

erythrocyte populations in said sample.

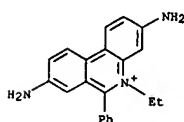
IT 1239-45-8, Ethidium bromide 25535-16-4, Propidium iodide

RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses)

(method for enumeration of micronucleated erythrocyte populations with a single laser flow cytometer)

RN 1239-45-8 CAPLUS

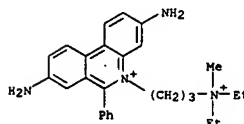
CN Phenanthridinium, 3,8-diamino-5-ethyl-6-phenyl-, bromide (8CI, 9CI) (CA INDEX NAME)

● Br⁻

RN 25535-16-4 CAPLUS

CN Phenanthridinium,

3,8-diamino-5-[3-(diethylmethylammonio)propyl]-6-phenyl-

L16 ANSWER 38 OF 8218 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)
, diiodide (8CI, 9CI) (CA INDEX NAME)● 2 I⁻RE.CNT 11 THERE ARE 11 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L16 ANSWER 39 OF 8218 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 2000:518508 CAPLUS
 DN 133:85112
 TI Method of isolating differentially expressed genes
 IN Zheng, Jianyu; Chen, Jing; Bao, Yunhe; Xiao, Wenlun
 PA Nankai Univ., Peop. Rep. China
 SO Faming Zhuanti Shenqing Gongkai Shuomingshu, 8 pp.
 CODEN: CNOOEV
 DT Patent
 LA Chinese
 FAN.CNT 1

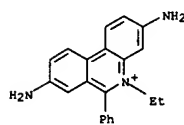
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI CN 1225391	A	19990811	CN 1999-100349	19990125
CN 1082545	B	20020410		
PRAI CN 1999-100349		19990125		

AB The present invention relates to a method of isolating differentially expressed genes from two or more related cells. The process comprises extracting total RNA from related cells by conventional methods, reverse transcription to synthesize cDNA using 6 bp random primers, PCR amplification using one 10-12 bp random primer, identification of differentially expressed genes by agarose gel electrophoresis, and isolating cDNA bands corresponding to differentially expressed genes.

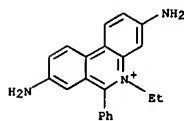
The isolated DNAs are subjected to amplification, cloning, Northern blot hybridization for confirmation, and sequencing.

IT 1239-45-8, Ethidium bromide
 RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses) (method of isolating differentially expressed genes)

RN 1239-45-8 CAPLUS
 CN Phenanthridinium, 3,8-diamino-5-ethyl-6-phenyl-, bromide (8CI, 9CI) (CA INDEX NAME)

● Br⁻

L16 ANSWER 40 OF 8218 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



RE.CNT 20 THERE ARE 20 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L16 ANSWER 40 OF 8218 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 2000:492037 CAPLUS
 DN 133:115875
 TI Nucleic acid amplification oligonucleotides with molecular energy transfer
 IN Nazarenko, Irina A.; Bhatnagar, Satish K.; Winn-Deen, Emily S.; Hohman, Robert J.
 PA Intergen Company, USA
 SO U.S., 98 pp., Cont.-in-part of U.S. Ser. No. 837,034.
 CODEN: USXXAM
 DT Patent
 LA English
 FAN.CNT 4

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI US 6090552	A	20000718	US 1997-891516	19970711
US 5866336	A	19990202	US 1997-778487	19970103
US 6117635	A	20000912	US 1997-837034	19970411
PRAI US 1996-683667	B2	19960716		
US 1997-778487	A2	19970103		
US 1997-837034	A2	19970411		

AB The present invention provides labeled nucleic acid amplification oligonucleotides, which can be linear or hairpin primers or blocking oligonucleotides. The oligonucleotides of the invention are labeled with donor and/or acceptor moieties of mol. energy transfer pairs. The moieties can be fluorophores, such that fluorescent energy emitted by the donor is absorbed by the acceptor. The acceptor may be a fluorophore that fluoresces at a wavelength different from the donor moiety, or it may be a quencher. The oligonucleotides of the invention are configured so that a donor moiety and an acceptor moiety are incorporated into the amplification product. The invention also provides methods and kits for directly detecting amplification products employing the nucleic acid amplification primers. When labeled linear primers are used, treatment with exonuclease or by using specific temperature eliminates the need for separation of unincorporated primers. This "closed-tube" format greatly reduces the possibility of carryover contamination with amplification products, provides for high throughput of samples, and may be totally automated.

IT 3546-21-2, Ethidium
 RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses) (nucleic acid amplification oligonucleotides with mol. energy transfer labels and methods based thereon)

RN 3546-21-2 CAPLUS
 CN Phenanthridinium, 3,8-diamino-5-ethyl-6-phenyl-, bromide (8CI, 9CI) (CA INDEX NAME)

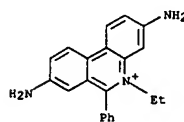
L16 ANSWER 41 OF 8218 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 2000:484896 CAPLUS
 DN 133:55647
 TI Method of quantitative determination of bacteria in biopreparations by fluorescence staining with ethidium bromide
 IN Tikhonravov, V. V.; Ageev, V. A.; Kovtun, V. P.; Kovtun, A. L.; Shvedov, V. V.
 PA Nauchno-Issledovatel'skii Institut Mikrobiologii Ministerstva Oborony Rossiiskoi Federatsii, Russia
 SO Russ.
 From: Izobreteniya 1998, (22), 343-344.
 CODEN: RUXKE7
 DT Patent
 LA Russian
 FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI RU 2117291	C1	19980810	RU 1997-109087	19970528
PRAI RU 1997-109087		19970528		

AB Title only translated.

IT 1239-45-8, Ethidium bromide
 RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses) (method of quant. determination of bacteria in biopreps. by fluorescence staining with ethidium bromide)

RN 1239-45-8 CAPLUS
 CN Phenanthridinium, 3,8-diamino-5-ethyl-6-phenyl-, bromide (8CI, 9CI) (CA INDEX NAME)

● Br⁻

L16 ANSWER 42 OF 8218 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 2000:434239 CAPLUS
 DN 133:71117
 TI The synthesis of 4,7-Dichlororhodamine dyes and their use in
 polynucleotide sequencing and fragment analysis
 IN Lee, Linda; Benson, Scott C.; Rosenblum, Barnett B.; Spurgeon, Sandra L.
 PA The Perkin-Elmer Corporation, USA
 SO U.S., 16 pp., Cont.-in-part of U.S. Ser. No. 38,191.
 CODEN: USXXAM
 DT Patent
 LA English
 FAN.CNT 6

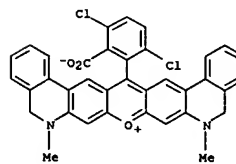
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI US 6080852	A	20000627	US 1999-277793	19990327
<-- US 5847162	A	19981208	US 1996-672196	19960627
<-- JP 2003221515	A2	20030808	JP 2002-280013	19970521
<-- US 6025505	A	20000215	US 1998-38191	19980310
<-- CA 2367868	AA	20001005	CA 2000-2367868	20000324
<-- WO 2000058406	A1	20001005	WO 2000-US8003	20000324

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
 RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
 EP 1165694 A1 20020102 EP 2000-916662 20000324
 EP 1165694 B1 20040922
 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO
 JP 2002540280 T2 20021126 JP 2000-608692 20000324
 EP 1386946 A1 20040204 EP 2003-25777 20000324
 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI, CY
 AU 772329 B2 20040422 AU 2000-37732 20000324
 AT 277128 E 20041015 AT 2000-916662 20000324
 ES 2226801 T3 20050401 ES 2000-916662 20000324
 US 6713622 B1 20040330 US 2000-578920 20000525
 US 2005112781 A1 20050526 US 2004-788660 20040226
 JP 2004305217 A2 20041104 JP 2004-152623 20040521
 PRAI US 1996-672196 A2 19960627
 US 1998-38191 A2 19980310
 JP 1998-502974 A3 19970521
 JP 2002-280013 A3 19970521
 US 1999-277793 A 19990327
 EP 2000-916662 A3 20000324
 WO 2000-US8003 W 20000324
 US 2000-578920 A1 20000525
 OS MARPAT 133:71117

L16 ANSWER 42 OF 8218 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)
 GI

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

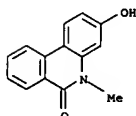
AB A set of 4,7-dichlororhodamine compds. useful as fluorescent dyes are disclosed having the structures (I) and (II); wherein R1-R6 are hydrogen, fluorine, chlorine, lower alkyl, lower alkene, lower alkyne, sulfonate, sulfone, amide, nitrite, lower alkoxy, linking group, or, when taken together, R1 and R6 is benzo, or, when taken together, R4 and R5 is benzo; R7-R10, R12-R16 and R18 may be hydrogen, fluorine, chlorine, lower alkyl, lower alkene, lower alkyne, sulfonate, sulfone, amino, amido, nitrite, lower alkoxy, linking group; R11 and R17 may be hydrogen, lower alkyl, lower alkene, lower alkyne, Ph, aryl, linking group; Y1-Y4 are hydrogen, lower alkyl, or cycloalkyl, or, when taken together, Y1 and R2, Y2 and R1 Y3 and R3, and/or Y4 and R4 is propano, ethano, or substituted forms thereof, and X1-X3 taken sep. are hydrogen, chlorine, fluorine, lower alkyl, carboxylate, sulfonate, hydroxymethyl, and linking group, or any combinations thereof. In another aspect, the invention includes reagents labeled with the 4,7-dichlororhodamine dye compds., including deoxynucleotides, dideoxynucleotides, and polynucleotides. In an addnl. aspect, the invention includes methods utilizing such dye compds. and reagents including dideoxy polynucleotide sequencing and fragment anal. methods.
 IT 278180-72-6P
 RL: ARG (Analytical reagent use); SPN (Synthetic preparation); ANST (Analytical study); PREP (Preparation); USES (Uses) (the synthesis of 4,7-Dichlororhodamine dyes and their use in polynucleotide sequencing and fragment anal.)
 RN 278180-72-6 CAPLUS
 CN Pyrano[3,2-b:5,6-b']diphenanthridin-8-ium, 17-[2,4(or 2,5)-dicarboxy-3,6-dichlorophenyl]-5,6,10,11-tetrahydro-6,10-dimethyl-, inner salt (9CI) (CA INDEX NAME)



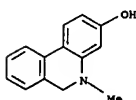
DI-CO₂H

L16 ANSWER 42 OF 8218 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

IT 40684-02-4P 278175-15-SP
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent) (the synthesis of 4,7-Dichlororhodamine dyes and their use in polynucleotide sequencing and fragment anal.)
 RN 40684-02-4 CAPLUS
 CN 6(5H)-Phenanthridinone, 3-hydroxy-5-methyl- (9CI) (CA INDEX NAME)

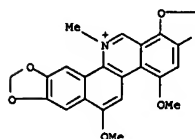


RN 278175-15-8 CAPLUS
 CN 3-Phenanthridinol, 5,6-dihydro-5-methyl- (9CI) (CA INDEX NAME)



RE.CNT 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L16 ANSWER 43 OF 8218 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 2000:419794 CAPLUS
 DN 133:149196
 TI Elucidating elicitation of alkaloids production in suspension cultures of Eschscholtzia californica
 AU Byun, Sang Yo
 CS School of Chemical Engineering and Biotechnology, Ajou University, Suwoncity, 442-749, S. Korea
 SO Biotechnology and Bioprocess Engineering (1999), 4(2), 124-128
 CODEN: BBEIAU; ISSN: 1226-8372
 PT Korean Society for Biotechnology and Bioengineering
 DT Journal
 LA English
 AB A math. model was developed to explain the elicitation mechanism. Nonlinear regression with model equations and exptl. data showed the time course changes of free receptor, the elicitor-receptor complex, mRNA, enzyme activity and macarpine formation after the yeast elicitor addition in suspension cultures of Eschscholtzia californica. The number of free receptors decreased as elicitors bound with receptors and formed the elicitor-receptor complex. The highest number for the elicitor-receptor complex was seen at 6 h after elicitation. The pattern of time course changes in mRNA formation was similar to that of the elicitor-receptor complex. The highest value of mRNA was obtained at 13 h from elicitation. The estimated time course changes in berberine bridge enzyme and macarpine formation were compared to their exptl. data. The elicitor-receptor dynamic model equations were useful to calculate the elicitation kinetics.
 IT 23594-80-1P, Macarpine
 RL: BMF (Bioindustrial manufacture); BPN (Biosynthetic preparation); BIOL (Biological study); PREP (Preparation) (elicitation of alkaloids production in suspension cultures of Eschscholtzia californica)
 RN 23594-80-1 CAPLUS
 CN [1,3]Benzodioxolo[5,6-c]-1,3-dioxolo[4,5-a]phenanthridinium, 5,7-dimethoxy-13-methyl- (9CI) (CA INDEX NAME)

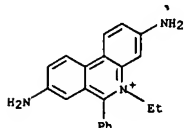


RE.CNT 21 THERE ARE 21 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

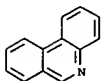
L16 ANSWER 44 OF 8218 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 2000:389293 CAPLUS
 DN 133:786
 TI Preparation for treatment of animals with piroplasmosis and method of its using
 IN Efremova, E. A.; Opanasyuk, A. S.; Deineko, G. I.
 PA Institut Eksperimental'noi Veterinariii Sibiri i Dal'nego Vostoka, Russia;
 RASKIN
 SO Russ.
 From: Izobreteniya 1998, (28), 216.
 CODEN: RUXKE7
 DT Patent
 LA Russian
 FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
RU 2119792	C1	19981010	RU 1997-116119	19970924

--
 PRAI RU 1997-116119 19970924
 AB Title only translated.
 IT 1239-45-8
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (preparation for treatment of animals with piroplasmosis and method of its using)
 RN 1239-45-8 CAPLUS
 CN Phenanthridinium, 3,8-diamino-5-ethyl-6-phenyl-, bromide (8CI, 9CI) (CA INDEX NAME)

● Br⁻

L16 ANSWER 45 OF 8218 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



RE.CNT 18 THERE ARE 18 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L16 ANSWER 45 OF 8218 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 2000:387072 CAPLUS
 DN 133:34143
 TI Metallic and organic contaminants in sediments of the St. Croix estuary and Passamaquoddy Bay
 AU Loring, D. H.; Milligan, T. G.; Willis, D. E.; Sandders, K. S.
 CS Science Branch, Maritimes Region, Department of Fisheries and Oceans,
 Bedford Institute of Oceanography, Dartmouth, NS, B2Y 4A2, Can.
 SO Canadian Technical Report of Fisheries and Aquatic Sciences (1998), 2245, 1-vii, 1-38
 CODEN: CTRSDR; ISSN: 0706-6457
 DT Report
 LA English
 AB Sedimentol. and baseline concns. of metallic (As, B, Ba, Be, Cd, Cr, Co, Cu, Mn, Mo, Ni, Pb, Sb, Se, Sr, Tl, U, V, Zn) and organic (polychlorinated biphenyls [PCB], polycyclic aromatic hydrocarbons [PAH]) pollutants in bottom sediment from the St. Croix estuary and adjacent Passamaquoddy Bay on the south-western coast of New Brunswick, were assessed. Insight into the anthropogenic and natural factors controlling the distribution of these pollutants is also discussed. Granulometric analyses indicated a high degree of floc settling and lack of resuspension for the Passamaquoddy Bay sediment that might make this area unsuitable for salmon aquaculture. Geochem. metal analyses showed the highest metal concns. occurred in fine-grained sediment below the mouth of the St. Croix river; lowest metal concns. were in muddy sands in the outer part of Letang Inlet and the St. Croix Estuary. Most metals were at or near natural concns., but 20% and 5% of the samples (n = 19) exceeded the contamination threshold (>20 and >40 mg/kg) concns. for As and Ni concns., resp. Normalization of metal data suggested anthropogenic inputs of Cd and perhaps Pb and Zn from the St. Croix River, although amts. have not yet exceeded contamination levels. Organic analyses indicated that measurable PCB residues occurred in only 1 sample. Measurable PAH residues (67-3144 ng/g) were observed in all analyzed samples (n = 13) and varied in concentration with the amount of material <63 µm. Residue patterns for the surveyed pollutants were consistent with hydrocarbon residue levels from combustion and ship traffic and/or municipal sources. Although these data represent a 1-time sampling, the possibility of increasing pollutant concns. in sediment exists. Pollutant build-up in sediment over time may have a detrimental effect on activities such as aquaculture in Passamaquoddy Bay, and, to a lesser extent, in the St. Croix estuary.
 IT 229-87-8, Phenanthridine
 RL: OCU (Occurrence, unclassified); POL (Pollutant); OCCU (Occurrence) (metal and organic compound pollutants in sediment of St. Croix Estuary and Passamaquoddy Bay)
 RN 229-87-8 CAPLUS
 CN Phenanthridine (6CI, 8CI, 9CI) (CA INDEX NAME)

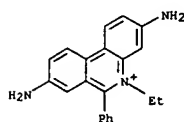
L16 ANSWER 46 OF 8218 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 2000:368704 CAPLUS
 DN 133:14300
 TI In situ method of analyzing cells by staining with multiple stains and using a spectral data collection device
 IN Garini, Yuval; Mcnamara, George; Soenksen, Dirk G.; Cabib, Dario;
 Buckwald, Robert A.
 PA Applied Spectral Imaging Ltd., Israel
 SO PCT Int. Appl., 129 pp.
 CODEN: PIXKD2
 DT Patent
 LA English
 FAN.CNT 6

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000031534	A1	20000602	WO 1999-US27000	19991116

--
 W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KG, KR, KP, KB, LC, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
 RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
 EP 767361 A2 19970409 EP 1993-203737 19930722
 --
 EP 767361 A3 19970813
 EP 767361 B1 20000301
 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, NL, SE
 EP 957345 A2 19991117 EP 1999-111903 19930722
 --
 EP 957345 A3 20000503
 EP 957345 B1 20021113
 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, NL, SE
 EP 957346 A2 19991117 EP 1999-111904 19930722
 --
 EP 957346 A3 20000503
 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, NL, SE
 AT 189927 E 20000315 AT 1993-203737 19930722
 --
 ES 2144441 T3 20000616 ES 1993-203737 19930722
 --
 ES 2188065 T3 20030616 ES 1999-111903 19930722
 DE 29624210 U1 20010628 DE 1996-29624210 19961210
 US 6165734 A 20001226 US 1998-196690 19981120
 --
 EP 1131631 A1 20010912 EP 1999-963904 19991116
 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO
 JP 2002530676 T2 20020917 JP 2000-584297 19991116
 PRAI US 1998-196690 A 19981120
 EP 1993-203737 A3 19930722
 EP 1999-111903 A 19930722
 US 1995-571047 A1 19951212
 EP 1996-944834 A 19961210
 US 1998-122704 A2 19980727
 WO 1999-US27000 W 19991116
 AB A method of in situ anal. of a biol. sample comprises the steps of (a) staining the biol. sample with N stains of which a first stain is selected

L16 ANSWER 46 OF 8218 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)
 from the group consisting of a first immunohistochem. stain, a first
 histol. stain and a first DNA ploidy stain, and a second stain is
 selected
 from the group consisting of a second immunohistochem. stain, a second
 histol. stain and a second DNA ploidy stain, with provisions that N is an
 integer greater than three and further that (i) if the first stain is the
 first immunohistochem. stain then the second stain is either the second
 histol. stain or the second DNA ploidy stain; (ii) if the first stain is
 the first histol. stain then the second stain is either the second
 immunohistochem. stain or the second DNA ploidy stain; whereas (iii) if
 the first stain is the first DNA ploidy stain then the second stain is
 either the second immunohistochem. stain or the second histol. stain; and
 (b) using a spectral data collection device for collecting spectral data
 from the biol. sample, the spectral data collection device and the N
 stains are selected so that a spectral component assocd. with each of the
 N stains is collectible. Figure (1) shows a block diagram illustrating
 the main components of an imaging spectrometer. Breast cancer tissue
 samples were stained with two histol. stains (hematoxylin and eosin), and
 four immunohistochem. stains (DAB, AEC, Fast Red, and BCIP/NBT) and
 measured using the Spectracube system.

IT 1239-45-8 Ethidium Bromide
 RL: ARG (Analytical reagent use); BUU (Biological use, unclassified);
 ANST (Analytical study); BIOL (Biological study); USES (Uses)
 (as DNA ploidy stain; in situ method of analyzing cells by staining
 with multiple stains and using a spectral data collection device)
 RN 1239-45-8 CAPLUS
 CN Phenanthridinium, 3,8-diamino-5-ethyl-6-phenyl-, bromide (8CI, 9CI) (CA
 INDEX NAME)



• Br⁻

IT 25535-16-4, Propidium Iodide
 RL: ARG (Analytical reagent use); BUU (Biological use, unclassified);
 ANST (Analytical study); BIOL (Biological study); USES (Uses)
 (as histol. stain, as DNA ploidy stain; in situ method of analyzing
 cells by staining with multiple stains and using a spectral data
 collection device)
 RN 25535-16-4 CAPLUS
 CN Phenanthridinium,
 3,8-diamino-5-[3-(diethylmethylammonio)propyl]-6-phenyl-

L16 ANSWER 47 OF 8218 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 2000:368678 CAPLUS
 DN 133:5809
 TI Enzymatic methods for dyeing with reduced vat and sulfur dyes
 IN Xu, Feng; Salmon, Sonja; Deussen, Heinz-josef Wilhelm; Lund, Henrik
 PA Novo Nordisk Biotech, Inc., USA; Novo Nordisk A/S; Novo Nordisk Biochem
 North America, Inc.
 SO PCT Int. Appl., 50 pp.
 CODEN: PIXDZ
 DT Patent
 LA English
 FAN.CNT 3

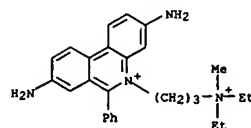
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000031333	A2	20000602	WO 1999-US27609	19991118

WO 2000031333 A3 20000908
 W: AE, AL, AU, BA, BB, BG, BR, CA, CN, CU, CZ, EE, GD, GE, HR, HU,
 ID, IL, IN, IS, JP, KP, KR, LC, LK, LR, LT, LV, MG, MK, MN, MX,
 NO, NZ, PL, RO, SG, SI, SK, SL, TR, TT, UA, UZ, VN, YU, ZA, ZM,
 A2, BY, KG, KZ, MD, RU, TJ, TM
 RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE,
 DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF,
 CG, CI, CM, GN, GW, ML, MR, NE, SN, TD, TG
 US 5948122 A 19990907 US 1998-199222 19981124
 US 6129769 A 20001010 US 1999-382267 19990824
 CA 2351468 AA 20000602 CA 1999-2351468 19991118
 AU 2000016311 A5 20000613 AU 2000-16311 19991118
 BR 9915593 A 20011106 BR 1999-15593 19991118
 EP 1153166 A2 20011114 EP 1999-959060 19991118
 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
 IE, SI, LT, LV, FI, RO
 JP 2002530545 T2 20020917 JP 2000-584133 19991118
 PRAI US 1998-199222 A 19981124
 US 1999-382267 A 19990824
 WO 1999-US27609 W 19991118

AB Fabric dyeing comprises (a) treating the material with a dyeing system
 which comprises 21 reduced vat dyes and/or 21 reduced S
 dyes, and (b) oxidizing the 21 reduced vat dyes or 21
 reduced S dyes adsorbed onto the treated material with an oxidation
 system
 comprising (i) an O source and 21 enzymes exhibiting oxidase
 activity or (ii) a H2O2 source and 21 enzymes exhibiting peroxidase
 activity, to convert the 21 reduced dyes to their original oxidized
 insol. colored forms. Example fabrics were yarn, fiber, garment or film
 made of cotton, diacetate, flax, fur, hide, leather, linen, Lyocell,
 polyacrylic, polyamide, polyester, ramie, rayon, silk, Tencel,
 triacetate,
 viscose or wool.

IT 475-71-8, Flavanthrone 3271-76-9, Vat Green 3
 RL: TEM (Technical or engineered material use); USES (Uses)
 (enzymic-mediated fabric dyeing with reduced vat and sulfur dyes in an
 insolubilizing step on fabric)
 RN 475-71-8 CAPLUS
 CN Benzo[h]benz[5,6]acridino[2,1,9,8-k]mna[acridine-8,16-dione (9CI) (CA
 INDEX NAME)

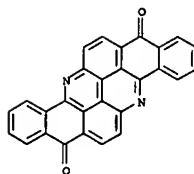
L16 ANSWER 46 OF 8218 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)
 , diiodide (8CI, 9CI) (CA INDEX NAME)



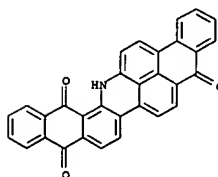
• 2 I⁻

RE.CNT 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

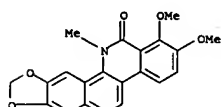
L16 ANSWER 47 OF 8218 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



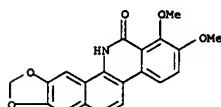
RN 3271-76-9 CAPLUS
 CN Anthra[2,1,9-mna]naphth[2,3-h]acridine-5,10,15(16H)-trione (6CI, 7CI,
 8CI,
 9CI) (CA INDEX NAME)



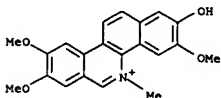
L16 ANSWER 48 OF 8218 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 2000:337868 CAPLUS
 DN 133:132460
 TI Active principles of *Zanthoxylum usambarense*
 AU He, Weidong; Van Puyvelde, Luc; De Kimpe, Norbert; Verbruggen, Luc;
 Anthonissen, Kristel; Van Der Flaas, Mark; Bosselaers, Jan
 CS Department of Organic Chemistry, University of Ghent, Ghent, B-9000,
 Belg.
 SO Mededelingen - Faculteit Landbouwkundige en Toegepaste Biologische
 Wetenschappen (Universiteit Gent) (1999), 64(3b), 565-569
 CODEN: MFLBER; ISSN: 1373-7503
 PB Universiteit Gent, Faculteit Landbouwkundige en Toegepaste Biologische
 Wetenschappen
 DT Journal
 LA English
 AB Six compds. were isolated from *Zanthoxylum usambarense*. Bioassay guided
 of fractionation of the dichloromethane exts. of the roots and bark by use
 of modern techniques led to the isolation of two physiol. active compds.,
 i.e. canthin-6-one (fungicide) and pellitorine (insecticide).
 IT 28342-33-8P, Oxycelerythrine 286939-05-7P
 RL: BOC (Biological occurrence); BSU (Biological study, unclassified);
 PUR (Purification or recovery); BIOL (Biological study); OCCU (Occurrence);
 PREP (Preparation)
 (of *Zanthoxylum usambarense*)
 RN 28342-33-8 CAPLUS
 CN [1,3]Benzodioxolo[5,6-c]phenanthridin-13(12H)-one,
 1,2-dimethoxy-12-methyl-
 (9CI) (CA INDEX NAME)



RN 286939-05-7 CAPLUS
 CN [1,3]Benzodioxolo[5,6-c]phenanthridin-13(12H)-one, 1,2-dimethoxy- (9CI)
 (CA INDEX NAME)



L16 ANSWER 49 OF 8218 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 2000:292883 CAPLUS
 DN 133:187599
 TI The role of sequence-specificity of DNA binding by
 benzo[c]phenanthridines fagarin and ethoxidine in their
 anti-topoisomerase I activity
 AU Devy, Jerome; Fleury, Fabrice; Duval, Olivier; Jardillier, Jean-Claude;
 Nabiev, Igor
 CS Institut Federatif de Recherche "Biomolecules", Universite de Reims,
 Reims, 51096, Fr.
 SO Spectroscopy of Biological Molecules: New Directions, European Conference
 on the Spectroscopy of Biological Molecules, 8th, Enschede, Netherlands,
 Aug. 29-Sept. 2, 1999 (1999), 297-298. Editor(s): Greve, Jan;
 Puppels, Gerwin J.; Otto, Cees. Publisher: Kluwer Academic Publishers,
 Dordrecht, Neth.
 CODEN: 68WFAJ
 DT Conference
 LA English
 AB The mol. basis of site-specific interactions between
 benzo[c]phenanthridines fagarin and ethoxidine and DNA was studied
 using different DNA sequences.
 IT 52259-65-1 218925-49-6, Ethoxidine
 RL: BAC (Biological activity or effector, except adverse); BSU
 (Biological study, unclassified); BIOL (Biological study)
 (role of sequence-specificity of DNA binding by
 benzo[c]phenanthridines fagarin and ethoxidine in
 anti-topoisomerase I activity)
 RN 52259-65-1 CAPLUS
 CN Benzo[c]phenanthridinium, 2-hydroxy-3,8,9-trimethoxy-5-methyl- (9CI) (CA
 INDEX NAME)



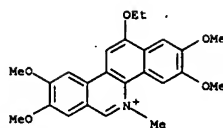
RN 218925-49-6 CAPLUS
 CN Benzo[c]phenanthridinium, 12-ethoxy-2,3,8,9-tetramethoxy-5-methyl-,
 methanesulfonate (9CI) (CA INDEX NAME)

CM 1

CRN 218925-48-5
 CMF C24 H26 N O5

L16 ANSWER 48 OF 8218 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)
 RE.CNT 14 THERE ARE 14 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L16 ANSWER 49 OF 8218 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



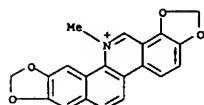
CM 2

CRN 16053-58-0
 CMF C H3 O3 S



RE.CNT 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L16 ANSWER 50 OF 8218 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 2000:288909 CAPLUS
 DN 133:29632
 TI Yield improvement in plant cell cultures by in situ extraction
 AU Pedersen, Henrik; Chin, Chee-Kok; Dutta, Amlan
 CS Department of Chemical and Biochemical Engineering, Rutgers University,
 Piscataway, NJ, 08855-0909, USA
 SO Plant Cell and Tissue Culture for the Production of Food Ingredients,
 (Proceedings of the Symposium on Plant Cell and Tissue Culture for the
 Production of Food Ingredients), San Francisco, April 13-17, 1997 (1999), Meeting Date 1997, 129-138. Editor(s): Fu, Tong-Jen;
 Singh, Gurmeet; Curtis, Wayne R. Publisher: Kluwer Academic/Plenum
 Publishers, New York, N. Y.
 CODEN: 68WEAG
 DT Conference: General Review
 LA English
 AB A review with 28 refs. The in situ extraction of plant products from
 cell suspension cultures can dramatically increase the total amts. of
 secondary metabolites formed in a typical batch culture cycle. The extraction
 phases can be immiscible liqs. or solids that are chosen based on their absorptive
 capacities as well as compatibility with the overall cell culture
 process.
 In combination with other treatments, such as elicitation,
 immobilization,
 as well as two-stage operation, further enhancements to the productivity
 can be achieved that greatly exceed the sum of the individual
 contributions. In examples with *Eschscholtzia californica* (California
 Poppy) from our lab, 42-fold increases have been observed for the
 production of the benzophenanthridine alkaloid sanguinarine over unelicited, unextd.
 cultures that individually achieved only a 6-fold increase or less.
 IT 2447-54-3P, Sanguinarine
 RL: BMF (Bioindustrial manufacture); BIOL (Biological study); PREP
 (Preparation)
 (yield improvement in plant cell cultures by in situ extraction)
 RN 2447-54-3 CAPLUS
 CN [1,3]Benzodioxolo[5,6-c]-1,3-dioxolo[4,5-i]phenanthridinium, 13-methyl-
 (9CI) (CA INDEX NAME)



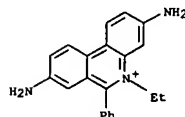
RE.CNT 28 THERE ARE 28 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L16 ANSWER 51 OF 8218 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)
 RE.CNT 11 THERE ARE 11 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L16 ANSWER 51 OF 8218 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 2000:283929 CAPLUS
 DN 132:310109
 TI Surface modified electrophoretic chambers
 AU Amigo, M. Goretti Alonso; McCormick, Randy M.
 PA Aclara Biosciences, Inc., USA
 SO U.S., 14 pp., Cont.-in-part of U.S. 5,935,401.
 CODEN: USXXAM
 DT Patent
 LA English
 FAN.CNT 10

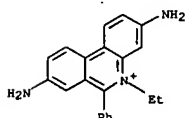
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 6056860	A	20000502	US 1997-933162	19970918
US 5935401	A	19990810	US 1996-715338	19960918

<--
 PRAI US 1996-715338 A2 19960918
 AB Electrophoretic chambers having 21 surface-modified regions are
 prepared, where the chambers include an anchoring polymer layer
 interpenetrating the surface of the chamber and an electrophoretic
 polymer layer copolymerized with the anchoring layer in the region of surface
 modification. The chambers are prepared by sequentially contacting the
 chamber surface with a first monomer capable of interpenetrating the
 surface and a second monomer capable of copolymerizing with the first monomer,
 followed by copolymerization of the monomers. Alternately, an electrophoretic
 polymer layer (e.g., Nafion) is noncovalently bound to the surface of a
 rigid polymer base material (e.g., acrylic polymers) without the aid of a
 sep. anchoring polymer layer. The chambers can be used in a variety of
 electrophoretic seps. and purifications in which entities, e.g.,
 Q174/HaeIII DNA ladders, are moved through a medium under the
 influence of an applied elec. field.
 IT 1239-45-8, Ethidium bromide
 RL: ARU (Analytical role, unclassified); PEP (Physical, engineering or
 chemical process); ANST (Analytical study); PROC (Process)
 (surface modified electrophoretic chambers)
 RN 1239-45-8 CAPLUS
 CN Phenanthridinium, 3,8-diamino-5-ethyl-6-phenyl-, bromide (8CI, 9CI) (CA
 INDEX NAME)



• Br⁻

L16 ANSWER 52 OF 8218 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 2000:272454 CAPLUS
 DN 133:55521
 TI Study on the chemiluminescent properties of ethidium bromide
 AU Zhuang, Huisheng; Chen, Guonan; Huang, Jinling
 CS Dep. Chem., Fuzhou Univ., Fuzhou, 350002, Peop. Rep. China
 SO Faguang Xuebao (1999), 20(4), 358-362
 CODEN: FAXUEW; ISSN: 1000-7032
 PB Kexue Chubanshe
 DT Journal
 LA Chinese
 AB In this work, we first investigated the chemiluminescent properties of
 ethidium bromide, and find that RNA can enhance the chemiluminescent
 intensity of reaction between ethidium bromide and KMnO4 in a strong acid
 medium. There is a linear relationship between the chemiluminescent
 intensity obtained in the system of EB-KMnO4-RNA and RNA concentration,
 therefore, a new chemiluminescent anal. method for the determination of
 RNA is
 established and used to determine RNA in synthetic samples. The linear
 calibration ranges is 0.10 approx. 10.0 µg/mL and the detection limit is
 0.06 µg/mL for RNA, the relative standard deviation is 3.8% for 3.5 µg/mL
 RNA. Interference ions were examined. The precision, accuracy and
 selectivity of the method are satisfactory.
 IT 1239-45-8, Ethidium bromide
 RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses)
 (chemiluminescent properties of ethidium bromide)
 RN 1239-45-8 CAPLUS
 CN Phenanthridinium, 3,8-diamino-5-ethyl-6-phenyl-, bromide (8CI, 9CI) (CA
 INDEX NAME)

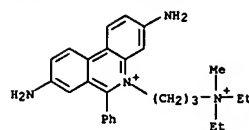


• Br⁻

L16 ANSWER 53 OF 8218 CAPLUS COPYRIGHT 2005 ACS on STN
AN 2000:271945 CAPLUS
DN 132:308660
TI Preparation of fluorescent peptides
IN Faure, Marie-Pierre; Vincent, Jean-Pierre; Gaudriault, Georges; Beaudet, Alain; Desjardins, Clarissa
PA Advanced Bioconcept, Inc., Can.
SO U.S., 16 pp., Cont.-in-part of U.S. Ser. No. 504,856, abandoned.
CODEN: USXXAM
DT Patent
LA English
FAN.CNT 9

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI US 6054557	A	20000425	US 1996-682810	19960710
<-- US 5693679	A	19971202	US 1995-416007	19950404
<-- US 5824772	A	19981020	US 1995-475751	19950607
<-- WO 9801472	A1	19980115	WO 1997-CA481	19970707
SE RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT,				
EP 920453	A1	19990609	EP 1997-929062	19970707
<-- R: CH, DE, FR, GB, LI, SE, FI				
US 6815423	B1	20041109	US 1999-285387	19990402
US 6821952	B1	20041123	US 1999-285422	19990402
US 6880367	B1	20040120	US 1999-356139	19990719
US 6677430	B1	20040113	US 2000-539593	20000331
PRAI US 1995-416007	A2	19950404		
US 1995-475751	A2	19950607		
US 1995-504856	B2	19950720		
US 1996-682810	A	19960710		
WO 1997-CA481	W	19970707		
OS MARPAT 132:308660				
AB Fluorescent peptides were prepared by attaching galanin or a galanin analog, derivative, or fragment to a light-emitting moiety through a CX bond (X = O, S, OH, CO, NH, H, alkoxy, NH, alkyl). Thus, galanin and endothelin were attached to fluorescein via the lysyl e-amino group via reaction with fluorescein N-hydroxysuccinimide ester. The products retained their biol. activity and retained a high affinity for their resp. receptors.				
IT 25535-16-4, Propidium iodide				
RL: RCT (Reactant); RACT (Reactant or reagent)				
(preparation of fluorescent peptides)				
RN 25535-16-4 CAPLUS				
CN Phenanthridinium,				
3,8-diamino-5-(3-(diethylmethylammonio)propyl)-6-phenyl-, diiodide (8CI, 9CI) (CA INDEX NAME)				

L16 ANSWER 53 OF 8218 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



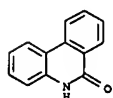
2 1-

RE.CNT 24 THERE ARE 24 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L16 ANSWER 54 OF 8218 CAPLUS COPYRIGHT 2005 ACS on STN
AN 2000:264150 CAPLUS
DN 133:159712
TI Effects of PARP inhibition on drug and FAS-induced apoptosis in leukaemic cells
AU Richardson, Deborah S.; Allen, Paul D.; Kelsey, Stephen M.; Newland, Adrian C.
CS Department of Haematology, St. Bartholomew's and Royal London School of Medicine, UK
SO Advances in Experimental Medicine and Biology (1999), 457(Drug Resistance in Leukemia and Lymphoma III), 267-279
CODEN: AEMBAP; ISSN: 0065-2598
PB Kluwer Academic/Plenum Publishers
DT Journal
LA English
AB Poly (ADP-ribose) polymerase (PARP) is activated following binding to DNA strand breaks and is cleaved in cells undergoing apoptosis. Work predominantly in murine systems has suggested that inhibitors of PARP might potentiate the effects of chemotherapeutic agents and be used as adjuncts to cancer therapy. Therefore, we studied the role of PARP in drug-induced apoptosis in HL-60, myeloid leukemia cells and found that pre-treatment with 3-aminobenzamide (3AB) or 6(5H)-phenanthridinone, inhibitors of PARP, resulted in resistance to, rather than potentiation of apoptotic death induced by DNA-damaging agents, idarubicin, etoposide and fludarabine, as determined by flow cytometry, following propidium iodide staining. 3AB treated CEM/VLB100, mdr-expressing human lymphoblastic leukemia cells were also found to be more resistant to idarubicin compared to cells treated with idarubicin alone, however, apoptosis was not reduced in parental CCRF-CEM cells under the same conditions. Similar results were obtained using agents with primary modes of action which do not involve DNA damage, vinblastine and a fas-ligating antibody (CH11). The precise role of PARP has yet to be defined but might involve effects on cell cycle progression. We conclude that PARP activation appears to be involved in apoptosis in certain leukemic cell lines and that these effects are independent of lineage or p-glycoprotein. Constitutive failure to activate PARP might be responsible for conferring resistance to apoptosis.

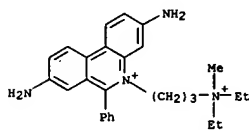
IT 1015-89-0, 6(5H)-Phenanthridinone
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study) (effects of PARP inhibition on drug and FAS-induced apoptosis in leukemic cells)

RN 1015-89-0 CAPLUS
CN 6(5H)-Phenanthridinone (6CI, 7CI, 8CI, 9CI) (CA INDEX NAME)

L16 ANSWER 54 OF 8218 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)
ALL CITATIONS AVAILABLE IN THE RE FORMAT

RE.CNT 59 THERE ARE 59 CITED REFERENCES AVAILABLE FOR THIS RECORD

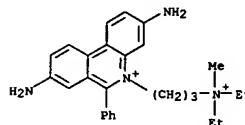
LI6 ANSWER 55 OF 8218 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 2000:262891 CAPLUS
 DN 133:85997
 TI The effect of peripheral site ligands on the reaction kinetics of phosphyl and carboxyl esters with acetylcholinesterase
 AU Radic, Zoran; Taylor, Palmer
 CS Department of Pharmacology, University of California at San Diego, La Jolla, CA, 92093-0636, USA
 SO Structure and Function of Cholinesterases and Related Proteins, [International Meeting on Cholinesterases and Related Proteins], 6th, La Jolla, CA, Mar. 20-24, 1998 (1998), 211-214. Editor(s): Doctor, Bhupendra P. Publisher: Plenum Publishing Corp., New York, N. Y. CODEN: 68VDA8
 DT Conference
 LA English
 AB The active serine of acetylcholinesterase (AChE) is readily acylated by organophosphorus compds. (OPs) rendering the enzyme inactive. OPs employed as pesticides or of potential concern as chemical warfare agents typically bear no charge and inhibit the enzyme at rates lower than cationic OPs. The inhibition rates for both cationic and neutral OPs are reduced by most ligands binding reversibly at the active center. However, binding of small cationic ligands, such as tetramethyl- and tetraethyl-ammonium into the AChE active center was also shown to increase rates of carbamylation and sulfonylation by the corresponding acyl fluorides. Here, we examine the effect of peripheral site ligands (propidium, gallamine, atropine, tubocurarine and the coumarins) on the rates of phosphorylation of mouse AChE by neutral OPs.
 IT 36015-30-2, Propidium
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study) (the effect of peripheral site ligands on the reaction kinetics of phosphyl and carboxyl esters with acetylcholinesterase)
 RN 36015-30-2 CAPLUS
 CN Phenanthridinium, 3,8-diamino-3-[3-(diethylmethylammonio)propyl]-6-phenyl- (9CI) (CA INDEX NAME)



RE.CNT 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

LI6 ANSWER 56 OF 8218 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

LI6 ANSWER 56 OF 8218 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 2000:262898 CAPLUS
 DN 133:101287
 TI Substrate binding to the peripheral site occurs on the catalytic pathway of acetylcholinesterase and leads to substrate inhibition
 AU Rosenberry, Terrone L.; Mallender, William D.; Thomas, Patrick J.; Szegletes, Tivadar
 CS Department of Pharmacology, Mayo Clinic Jacksonville, Jacksonville, FL, 32224, USA
 SO Structure and Function of Cholinesterases and Related Proteins, [International Meeting on Cholinesterases and Related Proteins], 6th, La Jolla, CA, Mar. 20-24, 1998 (1998), 189-196. Editor(s): Doctor, Bhupendra P. Publisher: Plenum Publishing Corp., New York, N. Y. CODEN: 68VDA8
 DT Conference
 LA English
 AB Our nonequilibrium steric blockade model, which requires no conformational interaction between the peripheral and acylation sites, can account for the inhibition observed with many peripheral site ligands. The redn of both association and dissociation rate consts. for huperzine A and TMTFA [N,N,N-trimethylammonio]trifluoroacetophenone by bound propidium provides strong support for the model. The binding of acetylthiocholine to the peripheral site largely overlaps with that of propidium but only slightly overlaps with that of fasciculins. This binding coupled with a blockade of of thiocholine product dissociation can account quant. for substrate inhibition at high substrate concns. However, acetylthiocholine binding to the peripheral site at lower substrate concns. may accelerate the second order rate constant kcat/Kapp to increase the efficiency of substrate hydrolysis under physiol. conditions.
 IT 36015-30-2, Propidium
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study) (substrate binding to the peripheral site occurs on the catalytic pathway of acetylcholinesterase and leads to substrate inhibition)
 RN 36015-30-2 CAPLUS
 CN Phenanthridinium, 3,8-diamino-3-[3-(diethylmethylammonio)propyl]-6-phenyl- (9CI) (CA INDEX NAME)



RE.CNT 10 THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

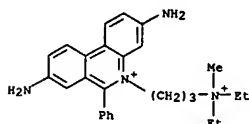
LI6 ANSWER 57 OF 8218 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 2000:252966 CAPLUS
 DN 132:289566
 TI Methods and microelectronic matrix devices for multiplex molecular biological reactions and assays
 IN Sosnowski, Ronald G.; Butler, William F.; Tu, Eugene; Nerenberg, Michael I.; Heller, Michael J.; Edman, Carl F.
 PA Nanogen, Inc., USA
 SO U.S., 74 pp., Cont.-in-part of U.S. 5,849,486.
 CODEN: USXXAM
 DT Patent
 LA English
 FAN.CNT 44

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 6051380	A	20000418	US 1997-986065	19971205
US 5605662	A	19970225	US 1993-146504	19931101
US 6017696	A	20000125	US 1994-271882	19940707
US 5632957	A	19970527	US 1994-304657	19940909
CA 2477138	AA	19950511	CA 1994-2477138	19941026
CA 2477138	C	19950511		
CA 2504343	AA	19950511	CA 1994-2504343	19941026
EP 1120155	A2	20010801	EP 2001-106838	19941026
EP 1120155	A3	20011024		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,				
IE EP 1120156	A2	20010801	EP 2001-106840	19941026
EP 1120156	A3	20011024		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,				
IE EP 1120469	A2	20010801	EP 2001-106841	19941026
EP 1120469	A3	20011024		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,				
IE EP 1120157	A2	20010801	EP 2001-106846	19941026
EP 1120157	A3	20011024		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,				
IE NZ 500373	A	20010831	NZ 1994-500373	19941026
US 5849486	A	19981215	US 1995-534454	19950927
AU 9885227	A1	19981210	AU 1998-85227	19980917
AU 733501	B2	20010517		
AU 9885228	A1	19981210	AU 1998-85228	19980917
AU 733500	B2	20010517		
CA 2312568	AA	19990617	CA 1998-2312568	19981201
WO 9929711	A1	19990617	WO 1998-US25475	19981201
W: AU, BR, CA, CN, JP, KR				
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
AU 9917069	A1	19990628	AU 1999-17069	19981201

L16 ANSWER 57 OF 8218 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)
 AU 738493 B2 20010920
 EP 1036085 A1 20000920 EP 1998-961847 19981201
 <--
 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
 IE, FI
 BR 9814257 A 20001003 BR 1998-14257 19981201
 <--
 JP 2001525193 T2 20011211 JP 2000-524303 19981201
 US 2001014449 A1 20010816 US 1999-291129 19990412
 US 6468742 B2 20021022
 US 6306348 B1 20011023 US 1999-354931 19990715
 US 6518022 B1 20030211 US 1999-444539 19991122
 AU 777515 B2 20041021 AU 2001-61873 20010817
 US 2003190632 A1 20031009 US 2002-170172 20020611
 US 2003073122 A1 20030417 US 2002-245206 20020916
 PRAI US 1993-146504 A2 19931101
 US 1994-271882 A2 19940707
 US 1994-304657 A2 19940909
 US 1995-534454 A2 19950927
 US 1996-708262 A2 19960906
 AU 1994-81257 A3 19941026
 CA 1994-2175483 A3 19941026
 CA 1994-2477138 A3 19941026
 EP 1995-900430 A3 19941026
 NZ 1994-330036 A1 19941026
 US 1996-725976 A1 19961004
 US 1997-859644 A1 19970520
 US 1997-986065 A 19971205
 US 1998-30156 A2 19980225
 AU 1998-85228 A3 19980917
 WO 1998-US25475 W 19981201
 US 1999-291129 A1 19990412
 US 1999-444539 A1 19991122

AB A self-addressable, self-assembling microelectronic device is designed and fabricated to actively carry out and control multi-step and multiplex mol. biol. reactions in microscopic formats. These reactions include nucleic acid hybridizations, antibody/antigen reactions, diagnostics, and biopolymer synthesis. The device can be fabricated using both microlithog. and micro-machining techniques. The device can electronically control the transport and attachment of specific binding entities to specific microlocations. The specific binding entities include mol. biol. mols. such as nucleic acids and polypeptides. The device can subsequently control the transport and reaction of analytes or reactants at the addressed specific microlocations. The device is able to concentrate analytes and reactants, remove non-specifically bound mols., provide stringency control for DNA hybridization reactions, and improve the detection of analytes. The device can be electronically replicated. Devices were fabricated and used in hybridization reactions.
 IT 1239-45-8, Ethidium bromide
 RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses) (methods and microelectronic matrix devices for multiplex mol. biol. reactions and assays)

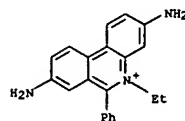
L16 ANSWER 58 OF 8218 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 2000:240664 CAPLUS
 DN 133:161439
 TI Energy transfer between fluorescein isothiocyanate and propidium iodide - a problem in the estimation of Tpot with the bromodeoxyuridine-DNA flow cytometry technique?
 AU Johansson, Maria C.; Baldetorp, Bo; Oredsson, Stina M.
 CS The Jubileum Institute, Department of Oncology, University Hospital, Lund, S-221 85, Swed.
 SO Analytical Cellular Pathology (1999), 19(2), 91-98
 CODEN: ACPAER; ISSN: 0921-8912
 PB IOS Press
 DT Journal
 LA English
 AB Energy transfer in flow cytometry can occur when two fluorochromes are bound in close proximity (generally within 100 Å) and the emission spectrum of one fluorochrome overlaps significantly with the excitation spectrum of the other. The latter criteria is fulfilled for the fluorochromes fluorescein isothiocyanate and propidium iodide and also the former when they, e.g., are used in bromodeoxyuridine - DNA flow cytometry methods. In the present growth kinetic study using this method, we show that energy transfer does take place between fluorescein isothiocyanate and propidium iodide which results in a detected increase in DNA content with 2-3%. Despite the erroneous increase in the obtained DNA content values, this does not seem to have any influence on the calcul. of DNA synthesis time and potential doubling time where the DNA content, based on the relative movement principle of the labeled cells, is used.
 IT 25535-16-4, Propidium iodide
 RL: ARU (Analytical role, unclassified); ANST (Analytical study) (effect of energy transfer between fluorescein isothiocyanate and propidium iodide when using bromodeoxyuridine-flow cytometry for Tpot measurements)
 RN 25535-16-4 CAPLUS
 CN Phenanthridinium, 3,8-diamino-5-[3-(diethylmethylammonio)propyl]-6-phenyl-, diiodide (8CI, 9CI) (CA INDEX NAME)



● 2 I⁻

RE.CNT 22 THERE ARE 22 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L16 ANSWER 57 OF 8218 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)
 RN 1239-45-8 CAPLUS
 CN Phenanthridinium, 3,8-diamino-5-ethyl-6-phenyl-, bromide (8CI, 9CI) (CA INDEX NAME)



● Br⁻

RE.CNT 17 THERE ARE 17 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L16 ANSWER 59 OF 8218 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 2000:238001 CAPLUS
 DN 132:261369
 TI Use of fluorescence perturbation induced by denaturation of nucleic acids by electrical fields for rapid analysis of hybridization behavior and in nanoscale synthesis
 IN Heller, Michael J.; Tu, Eugene; Sosnowski, Ronald G.; O'Connell, James P.
 PA Nanogen, Inc., USA
 SO U.S., 30 pp., Cont.-in-part of U.S. 5,849,486.
 CODEN: USXXAM
 DT Patent
 LA English
 FAN.CNT 44

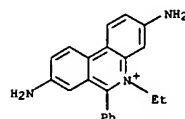
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI US 6048690	A	20000411	US 1997-855058	19970514
<-- EP 1067134	A2	20010110	EP 2000-121275	19921106
EP 1067134	A3	20010502		
EP 1067134	B1	20040728		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, IE				
US 5605662	A	19970225	US 1993-146504	19931101
<-- US 5565322	A	19961015	US 1994-232233	19940505
<-- US 5532129	A	19960702	US 1994-250951	19940527
<-- US 6017696	A	20000125	US 1994-271882	19940707
<-- US 5632957	A	19970527	US 1994-304657	19940909
<-- CA 2477138	AA	19950511	CA 1994-2477138	19941026
<-- CA 2477138	C	19950511		
CA 2504343	AA	19950511	CA 1994-2504343	19941026
<-- EP 1120155	A2	20010801	EP 2001-106838	19941026
EP 1120155	A3	20011024		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,				
IE EP 1120156	A2	20010801	EP 2001-106840	19941026
EP 1120156	A3	20011024		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,				
IE EP 1120469	A2	20010801	EP 2001-106841	19941026
EP 1120469	A3	20011024		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,				
IE EP 1120157	A2	20010801	EP 2001-106846	19941026
EP 1120157	A3	20011024		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,				
IE NZ 500373	A	20010831	NZ 1994-500373	19941026
US 5849486	A	19981215	US 1995-534454	19950927
<-- US 5849489	A	19981215	US 1996-703601	19960823
<-- WO 9851819	A1	19981119	WO 1998-US9357	19980507

W: AU, BR, CA, CN, JP, KR
 RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL,

L16 ANSWER 59 OF 8218 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)
 PT, SE
 AU 9874740 A1 19981208 AU 1998-74740 19980507
 <-- AU 9805227 A1 19981210 AU 1998-85227 19980917
 <-- AU 733501 B2 20010517
 AU 9805228 A1 19981210 AU 1998-85228 19980917
 <-- AU 733500 B2 20010517
 US 6569382 B1 20030527 US 1999-436311 19991108
 AU 777515 B2 20041021 AU 2001-61873 20010817
 US 2004086917 A1 20040506 US 2003-623080 20030718
 PRAI US 1991-790262 A2 19911107
 US 1993-146504 A2 19931101
 US 1994-232233 A1 19940505
 US 1994-250951 A1 19940527
 US 1994-258168 A2 19940610
 US 1994-271882 A2 19940707
 US 1994-304657 A2 19940909
 US 1995-534454 A2 19950927
 US 1996-703601 A2 19960823
 EP 1992-925225 A3 19921106
 WO 1992-US9827 W 19921106
 AU 1994-81257 A3 19941026
 CA 1994-2175483 A3 19941026
 CA 1994-2477138 A3 19941026
 EP 1995-900430 A3 19941026
 NZ 1994-330036 A1 19941026
 US 1996-760933 A2 19961206
 US 1997-855058 A 19970514
 US 1997-906569 A1 19970805
 US 1997-968065 A1 19971205
 WO 1998-US9357 W 19980507
 US 1998-129740 A2 19980805
 AU 1998-85228 A3 19980917
 US 2000-496864 B1 20000202
 AB Methods of using electronic perturbation of fluorescence, chemiluminescence and other emissions are described for use in the detection of nucleic acid hybrids. In a preferred method for hybridization anal. of a sample, an electronic stringency control device is used to perform the steps of: providing the sample, a first probe with a fluorescent label and a second probe with a label under hybridization conditions on the electronic stringency control device, forming a hybridization product, subjecting the hybridization product to an elec. field, monitoring the fluorescence from the hybridization product, and analyzing the fluorescent signal. The label preferably serves as a quencher for the fluorescent label and as the field destabilizes the hybrid, the quenching of the fluorescence is weakened and the signal can be detected. The method can also be used with a single reporter mol. as long as its fluorescence behavior changes upon formation of the hybrid. In yet another aspect of this invention, a method for achieving electronic fluorescence perturbation on an electronic stringency control device comprises the steps of: locating a first polynucleotide and a second polynucleotide adjacent to the electronic stringency control device, the first polynucleotide and second polynucleotide being complementary over at

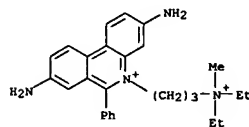
L16 ANSWER 60 OF 8218 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)
 AN 2000:229541 CAPLUS
 DN 132:233880
 TI Fluorimetric methods for the assessment of neuronal cell death as well as ion- and energy homeostasis using in vitro models of excitotoxicity and ischemia
 AU Melzian, Detlev; Sattler, Rita; Hafner, Mathias
 CS Department of Molecular Biology and Cell Culture Technology, Mannheim University of Applied Sciences, Mannheim, D-68163, Germany
 SO Schriften des Forschungszentrums Juelich, Lebenswissenschaften/Life Sciences (1999), 3(Cell Culture Models as Alternatives to Animal Experimentation for the Testing of Neuroprotective Compounds in Stroke Research), 35-78
 CODEN: SFLSF9; ISSN: 1433-5549
 PB Forschungszentrum Juelich GmbH
 DT Journal
 LA German
 AB Over the past 10 yr exptl. evidences were made to clarify the understanding of the basic pathophysiol. mechanism in excitotoxic and hypoxic-ischemic evoked neuronal cell injury. The neurotransmitter glutamate is becoming accepted as an important mediator of hypoxic/ischemic brain damage. Little information is available on the role of proton and Na⁺ balance and the direct disturbance of the energy metabolism in excitotoxic brain injury. Specific glutamate receptor antagonists are one of the recent pharmacol. strategies for reducing hypoxic/ischemic neuronal damage. However, the established methods to demonstrate the neuroprotective potency of drugs still use in vivo animal tests (e.g. MCAO-model). The objective of the present study, therefore, was to develop in vitro screening systems based on neuronal cell cultures, to reduce animal tests in preclin. drug screening to a min. The in vitro tests focused on (i) an excitotoxicity assay with high throughput screening capacity based on a fluorescence multiwell reader and (ii) digitized fluorescent imaging of individual neurons, with respect to their intracellular ion dynamics and changes in mitochondrial membrane potential as predictive markers of neurotoxicity. Neurotoxic concns. of glutamic acid induced a rapid and irreversible increase of the intracellular Ca concentration which was accompanied by a transient acidic shift of the intracellular pH, and followed by an intracellular alkalinization in cultured murine cortical neurons. In addition, glutamate triggered a continuous increase in intracellular Na and destroyed mitochondrial membrane potential. The loss of rhodamine-123 fluorescence highly correlated with the ongoing neuronal cell death and was shown to be a suitable parameter to determine the neuroprotective action of pharmaceutical compds. However, among the pharmacol. compds. tested only the non-competitive NMDA-receptor antagonist MK-801 was found to preserve neuronal viability by improving mitochondrial membrane potential and normalizing intracellular ion homeostasis. The authors also developed a new assay system, which allows the multiparametric monitoring of intracellular and extracellular parameters associated with stroke in a refined model of "in vitro ischemia". This model makes use of a sealed temperature controlled chamber placed on a microscope stage to mimic defined anaerobic/ischemic conditions. The following modifications were made to the chamber to facilitate routine ischemia expts.: oxygen and pH sensors are used to monitor oxygen concentration and extracellular pH value in the chamber solution. The electrodes are mounted on top of the chamber and placed

L16 ANSWER 59 OF 8218 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)
 least a portion of their lengths and forming a hybridization product, the hybridization product having an assocd. environmental sensitive emission label, subjecting the hybridization product and label to a varying electrophoretic force, monitoring the emission from the label, and analyzing the monitored emission to det. the electronic fluorescence perturbation effect. In yet another aspect of this invention, a method is provided for electronic perturbation catalysis of substrate mols. on an electronic control device contg. at least one microlocation comprising the steps of: immobilizing on the microlocation an arrangement of one or more reactive groups, exposing the reactive groups to a soln. contg. the substrate mols. of interest, and applying an electronic pulsing sequence which causes charge sepn. between the reactive groups to produce a catalytic reaction on the substrate mols. Use of the method to detect mutation in the ras gene is demonstrated.
 IT 1239-45-8, Ethidium bromide
 RI: ARU (Analytical role, unclassified); PRP (Properties); ANST (Analytical study)
 (as reporter group for detection of nucleic acid hybrids; use of fluorescence perturbation induced by denaturation of nucleic acids by elec. fields for rapid anal. of hybridization behavior and in nanoscale synthesis)
 RN 1239-45-8 CAPLUS
 CN Phenanthridinium, 3,8-diamino-5-ethyl-6-phenyl-, bromide (8CI, 9CI) (CA INDEX NAME)



RE.CNT 73 THERE ARE 73 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

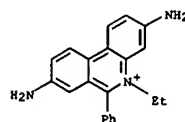
L16 ANSWER 60 OF 8218 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)
 directly above the cells. An optical window allows the video control of cells with phase contrast and fluorescence optics during the entire expt. The following parameters were used to assess neuronal cell death: (i) microscopic observation by phase contrast microscopy, (ii) vital dye exclusion/uptake with trypan blue or propidium iodide, (iii) intracellular changes of calcium, proton or sodium concns., (iv) changes of mitochondrial membrane potential. The authors anticipate that the described in vitro assays can be used to predict neuronal death during hypoxia/ischemia related insults and to further characterize the neuroprotective effect of drugs as a supplement for currently used animal tests and hence reduce the no. of lab. animals.
 IT 25535-16-4, Propidium iodide
 RI: ARU (Analytical role, unclassified); ANST (Analytical study)
 (neuronal cell death and ion- and energy homeostasis by excitotoxins, hypoxia, and ischemia in vitro assessed by fluorimetry)
 RN 25535-16-4 CAPLUS
 CN Phenanthridinium, 3,8-diamino-5-[3-(diethylmethylammonio)propyl]-6-phenyl-, diiodide (8CI, 9CI) (CA INDEX NAME)



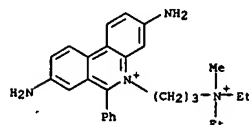
RE.CNT 25 THERE ARE 25 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L16 ANSWER 61 OF 8218 CAPLUS COPYRIGHT 2005 ACS ON STN
 AN 2000:163471 CAPLUS
 DN 133:116855
 TI Phase-sensitive flow cytometry: fluorescence lifetime-based sensing technology for analyzing free fluorophore and cells/particles labeled with fluorescent probes
 AU Steinkamp, John A.
 CS Los Alamos National Lab., Los Alamos, NM, USA
 SO Proceedings of SPIE-The International Society for Optical Engineering (1999), 3858 (Advanced Materials and Optical Systems for Chemical and Biological Detection), 151-160
 CODEN: PSISDG; ISSN: 0277-786X
 PB SPIE-The International Society for Optical Engineering
 DT Journal
 LA English
 AB A phase-sensitive cytometer that combines flow cytometry and fluorescence lifetime spectroscopy measurement principles to provide unique features for making frequency-domain lifetime measurements on free fluorophore (solution) and on fluorophore-labeled cells/particles in real time was developed. No other instrument can quantify lifetimes directly and resolve heterogeneous fluorescence based on differences in lifetimes (expressed as phase shifts), while maintaining the capability to make conventional flow cytometric measurements. The technol. has been characterized with respect to measurement precision, linearity, sensitivity, and dynamic range. Fluorescence lifetime distributions have been measured on autofluorescence lung cells, thymocytes labeled with antibody conjugated to fluorophores for studying fluorescence quenching as a function of antibody dilution and F/P ratio, cells stained with DNA-binding fluorochromes, and on particles labeled with fluorophores and free fluorophore (solution). Phase-resolved, fluorescence signal-intensity histograms have been recorded on thymocytes labeled with a phycoerythrin/Texas Red tandem conjugate and propidium iodide to demonstrate the resolution of signals from highly overlapping emission spectra. This technol. adds a new dimension to flow analyses of free and cell/particle-bound fluorophore. Lifetimes can be used as spectroscopic probes to study the interaction of markers with their targets, each other, and the surrounding microenvironment.
 IT 1239-45-8, Ethidium bromide 25535-16-4, Propidium iodide 50880-05-0
 RL: ARU (Analytical role, unclassified); ANST (Analytical study) (theory and instrumentation development of phase sensitive flow cytometry and biol. applications)
 RN 1239-45-8 CAPLUS
 CN Phenanthridinium, 3,8-diamino-5-ethyl-6-phenyl-, bromide (8CI, 9CI) (CA INDEX NAME)

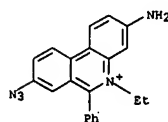
L16 ANSWER 61 OF 8218 CAPLUS COPYRIGHT 2005 ACS ON STN (Continued)



RN 25535-16-4 CAPLUS
 CN Phenanthridinium, 3,8-diamino-5-[3-(diethylmethylammonio)propyl]-6-phenyl-, diiodide (8CI, 9CI) (CA INDEX NAME)



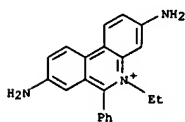
RN 58880-05-0 CAPLUS
 CN Phenanthridinium, 3-amino-8-azido-5-ethyl-6-phenyl-, bromide (9CI) (CA INDEX NAME)



L16 ANSWER 61 OF 8218 CAPLUS COPYRIGHT 2005 ACS ON STN (Continued)

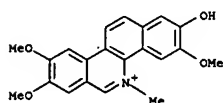
RE.CNT 23 THERE ARE 23 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L16 ANSWER 62 OF 8218 CAPLUS COPYRIGHT 2005 ACS ON STN
 AN 2000:124981 CAPLUS
 DN 132:249020
 TI Immobilization of DNA by UV irradiation and its utilization as functional materials
 AU Yamada, Masanori; Kato, Kozue; Shindo, Kazuna; Nomizu, Motoyoshi; Sakairi, Nobuo; Yamamoto, Hiroyuki; Nishi, Norio
 CS Division of Bioscience, Graduate School of Environmental Earth Science, Hokkaido University, Sapporo, 060-0810, Japan
 SO Nucleic Acids Symposium Series (1999), 42 (Twenty-sixth Symposium on Nucleic Acids Chemistry, 1999), 103-104
 CODEN: NACSD8; ISSN: 0261-3166
 PB Oxford University Press
 DT Journal
 LA English
 AB The water-insol. DNA film was successfully prepared by UV irradiation
 The DNA film was stable in water. It could effectively accumulate DNA-binding intercalating materials such as ethidium bromide, dibenzo-p-dioxin and benzo(a)pyrene. DNA was immobilized onto nonwoven cellulose fabrics, also by UV irradiation. The DNA immobilized cloth was found to bind silver ions. The DNA-cloth containing silver ion showed antibacterial activity. The water-insol. DNA prepared by UV irradiation has a potential ability to serve as biomaterials for medical, engineering and environmental objects.
 IT 1239-45-8, Ethidium bromide
 RL: PEP (Physical, engineering or chemical process); PROC (Process) (immobilization of DNA by UV irradiation and trapping of intercalating materials)
 RN 1239-45-8 CAPLUS
 CN Phenanthridinium, 3,8-diamino-5-ethyl-6-phenyl-, bromide (8CI, 9CI) (CA INDEX NAME)

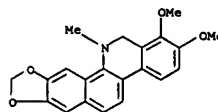


RE.CNT 9 THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L16 ANSWER 63 OF 8218 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 2000:104317 CAPLUS
 DN 132:308634
 TI Molecular probes of protein synthesis and function and synthesis of fagaronine analogs
 AU Shayo, Yuda Francis
 CS Univ. of Virginia, Charlottesville, VA, USA
 SO (1999) 187 pp. Avail.: UMI, Order No. DA9935090
 From: Diss. Abstr. Int., B 1999, 60(6), 2706
 DT Dissertation
 LA English
 AB Unavailable
 IT 52259-65-LDP, Fagaronine, analogs
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (synthesis of fagaronine analogs via combinatorial solution phase chemical)
 RN 52259-65-1 CAPLUS
 CN Benzo(c)phenanthridinium, 2-hydroxy-3,8,9-trimethoxy-5-methyl- (9CI) (CA INDEX NAME)

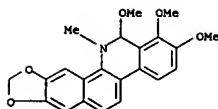


L16 ANSWER 64 OF 8218 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 2000:103520 CAPLUS
 DN 132:276655
 TI Angoline and other alkaloids from the roots of Glaucium oxylobum Boiss. and Buhse
 AU Hadjiakhoondi, A.; Morteza-Semnani, K.; Inanloo, H. R.; Pirali-Hamedani, M.; Shafiee, A.
 CS Department of Medicinal Chemistry, Tehran University of Medical Sciences, Tehran, 14155/6451, Iran
 SO Daru, Journal of Faculty of Pharmacy, Tehran University of Medical Sciences (1999), 7(3), 31-35
 CODEN: DJTSFE; ISSN: 1560-8115
 PB Tehran University of Medical Sciences, Faculty of Pharmacy
 DT Journal
 LA English
 AB Glaucium oxylobum Boiss & Buhse population Golestan forest was shown to contain four major alkaloids, protopine, bulbocapnine, corydine, isocorydine and three minor alkaloids, dihydrochelyerythrine, angoline and isocorytuberine. Glaucium oxylobum Boiss & Buhse population Roodbar was shown to contain two major alkaloids, protopine and dicentrinone and three minor alkaloids, angoline, 8-acetonyldihydrosanguinarine and α -allocryptopine. Angoline was detected for the first time in Glaucium.
 IT 6880-91-7P, Dihydrochelyerythrine 21080-31-9P, Angoline 37687-34-6P
 RL: BOC (Biological occurrence); BSU (Biological study, unclassified); PRP (Properties); PUR (Purification or recovery); BIOL (Biological study); OCCU (Occurrence); PREP (Preparation)
 (isolation of angoline and other alkaloids from the roots of Glaucium)
 RN 6880-91-7 CAPLUS
 CN [1,3]Benzodioxolo[5,6-c]phenanthridine, 12,13-dihydro-1,2-dimethoxy-12-methyl- (9CI) (CA INDEX NAME)

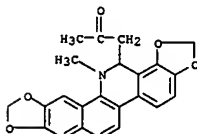


RN 21080-31-9 CAPLUS
 CN [1,3]Benzodioxolo[5,6-c]phenanthridine, 12,13-dihydro-1,2,13-trimethoxy-12-methyl- (9CI) (CA INDEX NAME)

L16 ANSWER 64 OF 8218 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



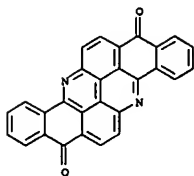
RN 37687-34-6 CAPLUS
 CN 2-Propanone, 1-(13,14-dihydro-13-methyl[1,3]benzodioxolo[5,6-c]-1,3-dioxolo[4,5-i]phenanthridin-14-yl)- (9CI) (CA INDEX NAME)



RE.CNT 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L16 ANSWER 65 OF 8218 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 2000:91805 CAPLUS
 DN 133:13501
 TI Infrared spectra of U.S. automobile original topcoats (1974-1989): VI. Identification and analysis of yellow organic automotive paint pigments-Isoindolinone Yellow 3R, Isoindoline Yellow, Anthrapyrimidine Yellow, and miscellaneous yellows
 AU Suzuki, Edward M.
 CS Washington State Crime Laboratory, Seattle, WA, USA
 SO Journal of Forensic Sciences (1999), 44(6), 1151-1175
 CODEN: JFSCAS; ISSN: 0022-1198
 PB American Society for Testing and Materials
 DT Journal
 LA English
 AB Two yellow organic pigments, Benzimidazolone Yellow 3G and Benzimidazolone Yellow 4G, were identified in some U.S. automobile original (OEM) topcoats (1974-1989) in previous work in this study. The topcoats consisted of single layer finishes (monocoats) from the Reference Collection of Automotive Paints, and the pigments were identified in situ using IR spectroscopy. The identification, anal., and occurrence of other yellow organic pigments used in these finishes, including Isoindolinone Yellow 3R, Isoindoline Yellow, and Anthrapyrimidine Yellow, are described here. Based on a spectral survey of Reference Collection yellow, orange, brown and green nonmetallic monocoats, absorptions of Isoindolinone Yellow 3R were observed in the spectra of approx. three dozen yellow monocoats and one dozen orange ones. Isoindoline Yellow was identified in a single orange nonmetallic enamel. This pigment is now more common since it was one of several replacements for Chrome Yellow-a popular lead-containing pigment which is no longer used in U.S. automobile OEM finishes-and it was identified in several recent yellow nonmetallic basecoat/clearcoat finishes. Weak absorptions of Anthrapyrimidine Yellow were identified in the spectrum of a single yellow nonmetallic enamel. Spectra of several other yellow organic automotive paint pigments are also presented and discussed.
 IT 475-71-8, Flavanthrone Yellow
 RL: ANT (Analyte); PRP (Properties); ANST (Analytical study)
 (IR spectra for identification and anal. of yellow organic automotive paint pigments)
 RN 475-71-8 CAPLUS
 CN Benzo[h]benz[5,6]acridino[2,1,9,8-k]mna]acridine-8,16-dione (9CI) (CA INDEX NAME)

L16 ANSWER 65 OF 8218 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

RE.CNT 17 THERE ARE 17 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L16 ANSWER 66 OF 8218 CAPLUS COPYRIGHT 2005 ACS on STN

AN 2000:90544 CAPLUS

DN 133:86429

TI Viability assays for cells in vitro: the ethidium/calcein assay and the immunofluorescence combination assay

AU Thompson, Theresa A.

CS Departments of Biology and Nursing, Millersville University, Millersville, PA, USA

SO Methods in Molecular Medicine (1999), 22, 145-155

CODEN: MOMEFN

PB Humana Press Inc.

DT Journal

LA English

AB Details are given for the ethidium/calcein assay which is based on hydrolysis of calcein-AM with subsequent fluorescent detection of the resulting calcein. The combination of the two title assays are also described. In the immunofluorescence assay, cells which are judged to be surviving by the ethidium/calcein assay are incubated with cell type-specific primary antibodies and fluorophore-tagged or chromogenic secondary antibodies.

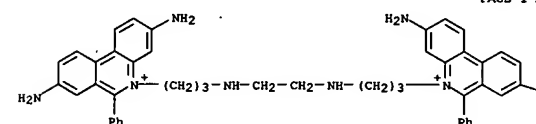
IT 61926-22-5, Ethidium homodimer

RL: ARU (Analytical role, unclassified); ANST (Analytical study)

(viability assays for cells in vitro based on the ethidium/calcein assay and the immunofluorescence combination assay)

RN 61926-22-5 CAPLUS

CN Phenanthridinium, 5,5'-[1,2-ethanediylbis(imino-3,1-propanediyl)]bis[3,8-diamino-6-phenyl-, dichloride, dihydrochloride (9CI) (CA INDEX NAME)

● 2 Cl⁻

● 2 HCl

PAGE 1-A

L16 ANSWER 66 OF 8218 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

PAGE 1-B

—NH₂RE.CNT 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L16 ANSWER 67 OF 8218 CAPLUS COPYRIGHT 2005 ACS on STN

AN 2000:87958 CAPLUS

DN 132:247550

TI Layer by layer assembly of DNA film via Zr(IV) ion and its intercalation property

AU Liu, Minghua; Yamashita, Knichi

CS Institute of Photographic Chemistry, Chinese Academy of Sciences, Beijing, 100101, Peop. Rep. China

SO Science in China, Series B: Chemistry (1999), 42(6), 567-570

CODEN: SCBCFQ; ISSN: 1006-9291

PB Science in China Press

DT Journal

LA English

AB In order to study the mol. recognition ability of DNA and different behavior of dyes incorporated into the base pairs, DNA mol. was assembled layer by layer via a Zr(IV) ion. The UV absorption spectra showed the uniform layer assembly of the DNA film. The fabricated DNA film was water-insol. and maintained the native B-form structure. UV and CD measurements showed that the DNA film could intercalate ethidium bromide (EtBr).

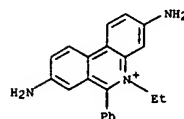
IT 1239-45-8, Ethidium bromide

RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)

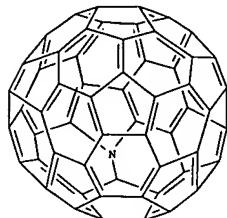
(DNA film assembled via Zr(IV) ion intercalate EtBr)

RN 1239-45-8 CAPLUS

CN Phenanthridinium, 3,8-diamino-5-ethyl-6-phenyl-, bromide (8CI, 9CI) (CA INDEX NAME)

● Br⁻RE.CNT 19 THERE ARE 19 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

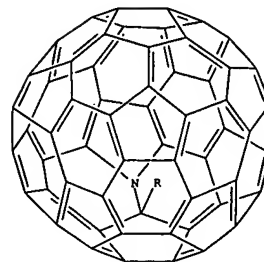
L16 ANSWER 68 OF 8218 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 2000:65589 CAPLUS
 DN 133:17330
 TI Chemistry of fullerene. Heterofullerenes
 AU Suzuki, Toshiyasu
 CS Inst. Mol. Sci. Japan
 SO Kikan Kagaku Soetsu (1999), 43(Furaren no Kagaku), 49-51
 CODEN: KKSOC
 PB Nippon Kagakkai
 DT Journal; General Review
 LA Japanese
 AB A review, with 16 refs., is given on (1) gas phase formation of heterofullerenes and (2) organic syntheses and chemical properties of azafullerene C₅₉NH and (C₅₉N)₂.
 IT 166036-50-6P, 9H-1-Aza[5,6]fullerene-C₆₀-1h 183382-73-2P
 , 9,9'-Bi-9H-1-aza[5,6]fullerene-C₆₀-1h
 RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
 (gas phase formation of heterofullerenes and organic syntheses and chemical properties of azafullerene and azafullerene dimer)
 RN 166036-50-6 CAPLUS
 CN 9H-1-Aza[5,6]fullerene-C₆₀-1h (9CI) (CA INDEX NAME)



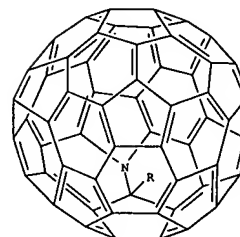
RN 183382-73-2 CAPLUS
 CN 9,9'-Bi-9H-1-aza[5,6]fullerene-C₆₀-1h (9CI) (CA INDEX NAME)

L16 ANSWER 68 OF 8218 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

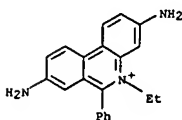
PAGE 1-A



PAGE 2-A



L16 ANSWER 69 OF 8218 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 2000:64281 CAPLUS
 DN 132:219062
 TI Consideration of end effects of DNA hybridization in selection of fluorescent dyes for development of optical biosensors
 AU Jakeway, S. C.; Krull, U. J.
 CS Chemical Sensors Group, Department of Chemistry, University of Toronto at Mississauga, Mississauga, ON, L5L 1C6, Can.
 SO Canadian Journal of Chemistry (1999), 77(12), 2083-2087
 CODEN: CJCHAG; ISSN: 0008-4042
 PB National Research Council of Canada
 DT Journal
 LA English
 AB Intercalating fluorescent dyes are in widespread use to detect the presence of double-stranded DNA. Applications include the development of biosensors that rely on the attachment ("tethering") of a dye mol. by a short hydrocarbon chain to the terminus of a strand of DNA so that dye is continuously available and the biosensor is fully reversible. Double strands of DNA have end effects that limit the stability of hybridization and dye intercalation near the termini of the duplexes. Therefore, the selection of the dye must be based on consideration of spectroscopic properties and also issues associated with tether length and the stoichiometry of the binding of the dye with double- and single-stranded DNA. Ethidium bromide (EB) has been used extensively to detect hybridization of DNA in applications such as electrophoresis, gene chips, and biosensors. A number of dyes with greater quantum efficiency than EB for detection of hybridization have been reported. Furthermore, other practical spectroscopic advantages can be gained in terms of improved S/N by use of dyes that have excitation that is red shifted relative to EB. Pyrylium iodide has been disclosed as an intercalator of high quantum efficiency and long excitation wavelength. This work investigates pyrylium iodide in comparison to EB as a candidate for preparation of a tethered dye for detection of hybridization of DNA 20-mers.
 IT 1239-45-8, Ethidium bromide
 RE: APC (Analytical reagent use); BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); ANST (Analytical study); BIOL (Biological study); USES (Uses)
 (double-stranded DNA detection and intercalation with pyrylium iodide)
 RN 1239-45-8 CAPLUS
 CN Phenanthridinium, 3,8-diamino-5-ethyl-6-phenyl-, bromide (8CI, 9CI) (CA INDEX NAME)



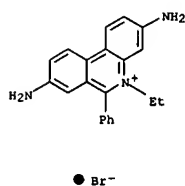
• Br⁻

L16 ANSWER 69 OF 8218 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

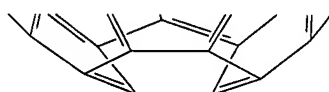
L16 ANSWER 70 OF 8218 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 2000:58960 CAPLUS
 DN 132:118321
 TI Method of identifying individuals of eukaryotic species based on PCR fingerprinting of inter SINE sequences
 IN Ohara, Ichiro; Nakayama, Ichiro; Yasue, Hiroshi
 PA Ministry of Agriculture, Forestry and Fishery, Japan
 SO Jpn. Kokai Tokkyo Koho, 18 pp.
 CODEN: JKOXAF
 DT Patent
 LA Japanese
 FAN.CMT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2000023671	A2	20000125	JP 1998-195692	19980710
JP 2913035	B2	19990628		
JP 1998-195692		19980710		

AB A method of identifying individuals of eukaryotic species, particularly mammals and fish, based on PCR fingerprinting is disclosed. The method consists of PCR amplifying sequences between the short interspersed repetitive element (SINE), characteristic of the species, of the DNA sample derived from the genome of the eukaryote using primers having sequences complementary to SINE with mismatched sequence attached to the 3' end. PCR products are gel electrophoresed to obtain a fingerprint, which is then compared for individual identification.
 IT 1239-45-8, Ethidium bromide
 RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses) (method of identifying individuals of eukaryotic species based on PCR fingerprinting of inter SINE sequences)
 RN 1239-45-8 CAPLUS
 CN Phenanthridinium, 3,8-diamino-5-ethyl-6-phenyl-, bromide (8CI, 9CI) (CA INDEX NAME)



L16 ANSWER 71 OF 8218 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

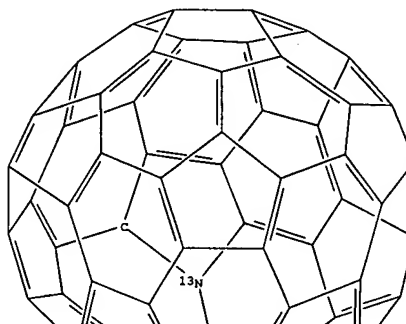


PAGE 2-A

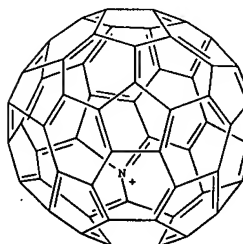
RE.CMT 26 THERE ARE 26 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L16 ANSWER 71 OF 8218 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 2000:52018 CAPLUS
 DN 132:186703
 TI Direct preparation of radioactive fullerenes as a tracer for applications
 AU Ohtsuki, T.; Masumoto, K.; Shikano, K.; Sueki, K.; Tanaka, T.; Komatsu, K.
 CS Laboratory of Nuclear Science, Tohoku University, Sendai, 982, Japan
 SO Biological Trace Element Research (1999), 71-72, 489-498
 CODEN: BTERDG; ISSN: 0163-4984
 PB Humana Press Inc.
 DT Journal
 LA English
 AB The C60 and C70 fullerenes were irradiated by high-energy γ -rays and charged particles. The irradiated samples were dissolved in CS₂ and/or toluene and filtered to remove insol. byproducts. Finally, radioactive fullerenes and products labeled with ¹¹C or ¹³N were isolated and detected in the liquid phase by radiochromatog. (1) Not only ¹¹C or ¹³N radioactive monomer fullerenes but also their dimers (trimers and, possibly, tetramers) were produced by recoil implantation process following nuclear reaction and (2) the radioactive fullerene labeled with ¹¹C yields led to high yields.
 IT 220601-55-8P, 2H-1-Aza[5,6]fulleren-2-yl-C60-1h-1-13N
 RL: PNU (Preparation, unclassified); PREP (Preparation) (direct preparation of radioactive fullerenes as a tracer for applications)
 RN 220601-55-8 CAPLUS
 CN 2H-1-Aza[5,6]fulleren-C60-1h-2-yl-1-13N (9CI) (CA INDEX NAME)

PAGE 1-A



L16 ANSWER 72 OF 8218 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 2000:46803 CAPLUS
 DN 132:200691
 TI The optical properties of (C59N)2
 AU Wan, XianGang; Dong, JinMing; Xing, DingYu
 CS National Laboratory of Solid State Microstructures, Nanjing University, Nanjing, 210008, Peop. Rep. China
 SO Communications in Theoretical Physics (1999), 32(4), 515-520
 CODEN: CTPHDI; ISSN: 0253-6102
 PB International Academic Publishers
 DT Journal
 LA English
 AB Using the extended Hubbard model and sum-over-state method, the authors have calculated the linear polarizability α and the 3rd-order nonlinear polarizability γ for (C59N)2. (C59N)2 has very big γ value (around 10-32 esu), and its α and γ values are bigger than those of C59N. In particular, when 1.2 eV $\leq 3\omega$, (C59N)2 has much larger γ values than C59N.
 IT 146614-30-4, Azonia[5,6]fullerene-C60-1h
 RL: PRP (Properties) (optical properties of (C59N)2 and its monomer)
 RN 146614-30-4 CAPLUS
 CN Azonia[5,6]fullerene-C60-1h (9CI) (CA INDEX NAME)



RE.CMT 29 THERE ARE 29 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L16 ANSWER 73 OF 8218 CAPLUS COPYRIGHT 2005 ACS on STN
AN 2000:44204 CAPLUS
DN 132:60110
TI Identification of genetic subtypes by restriction endonuclease analysis
of
genomic DNA followed by gel electrophoresis
IN Samadpour, Mansour
PA USA
SO PCT Int. Appl., 29 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9840515	A1	19980917	WO 1998-US4599	19980309

<-- W: AL, AM, AU, AZ, BA, BB, BG, BR, BY, CA, CN, CU, CZ, EE, GE, GW, HU, ID, IL, IS, JP, KG, KP, KR, KZ, LC, LK, LR, LT, LV, MD, MG, MK, MN, MX, NO, NZ, PL, RO, RU, SG, SI, SK, SL, TJ, TM, TR, TT, UA, US, UZ, VN, YU, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: CH, CH, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG

AU 984551	A1	19980929	AU 1998-64551	19980309
EP 970245	A1	20000112	EP 1998-910267	19980309

<-- EP 970245 BI 20041201
R: CH, DE, FR, GB, IT, LI, NL

PRAI US 1997-39056 A 19970310
WO 1998-US4599 W 19980309

AB The invention provides a method for the identification of genetic subtypes

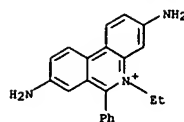
using restriction endonuclease anal. of genomic DNA followed by resolution on

gel electrophoresis. The method employs frequent cutting restriction enzymes that produce large nos. of DNA fragments between 0.1 and 20 kb. Anal. of a portion of the smaller sized fragments gives a fingerprint distinctive of a particular genetic subtype.

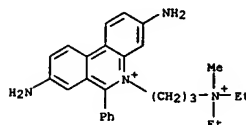
IT 1239-45-8, Ethidium bromide 25535-16-4, Propidium iodide
RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses) (DNA staining with; identification of genetic subtypes by restriction endonuclease anal. of genomic DNA followed by gel electrophoresis)

RN 1239-45-8 CAPLUS
CN Phenanthridinium, 3,8-diamino-5-ethyl-6-phenyl-, bromide (8CI, 9CI) (CA INDEX NAME)

L16 ANSWER 73 OF 8218 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



RN 25535-16-4 CAPLUS
CN Phenanthridinium, 3,8-diamino-5-[3-(diethylmethyammonio)propyl]-6-phenyl-, diiodide (8CI, 9CI) (CA INDEX NAME)



RE.CNT 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L16 ANSWER 74 OF 8218 CAPLUS COPYRIGHT 2005 ACS on STN
AN 2000:39761 CAPLUS
DN 132:303070
TI The inhibitory action of tamoxifen on the contraction of Ascaris suum somatic muscle in response to acetylcholine
AU Trim, N.; Holden-Dye, L.; Walker, R. J.
CS School of Biological Sciences, University of Southampton, Southampton, SO16 7PX, UK
SO Parasitology (1999), 119(6), 655-662
CODEN: PARAAE; ISSN: 0031-1820
PB Cambridge University Press
DT Journal
LA English

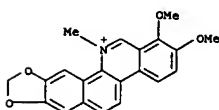
AB The somatic muscle of Ascaris suum is principally under the excitatory control of the neuromuscular junction transmitter, acetylcholine (ACh). However, it has recently been shown that neuropeptides also play an important role in the motor-nervous system and one of these, AF3 (AVPGVLRamide), also contracts muscle. The events which trigger contraction to ACh and AF3 would appear to be different, with ACh activating a nicotinic acetylcholine receptor while the response to AF3

is most likely to involve a G-protein-coupled receptor neg. coupled to adenylate cyclase. In order to further elucidate differences in the cellular signalling pathways through which ACh and AF3 elicit muscle contraction, the authors investigated the actions of protein kinase C inhibitors, tamoxifen and chelerythrine, on the dorsal somatic muscle strip of A. suum. Contractions in response to 1 μ M AF3 were potentiated by 17% in the presence of 10 μ M tamoxifen ($P < 0.05$; $n = 8$); however, contractions in response to 10 μ M ACh were markedly inhibited (tamoxifen IC50 $44 \pm 18 \mu$ M; $n = 6$). Tamoxifen also blocked muscle cell depolarizations to 5 μ M ACh (IC50 $4 \pm 1 \mu$ M; $n = 6$) and 1 μ M levamisole (IC50 $14 \pm 6 \mu$ M; $n = 4$). This was unlikely to be a non-specific effect on the membrane as

hyperpolarizations to 10 μ M GABA were unaffected (93% of control with 10 μ M tamoxifen; $n = 6$; $P > 0.05$). However, another inhibitor of mammalian protein kinase C, chelerythrine, did not affect the response either to ACh or AF3 ($n = 6$).

IT 34316-15-9, Chelerythrine
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study) (Inhibitory action of tamoxifen on contraction of Ascaris suum somatic muscle in response to acetylcholine)

RN 34316-15-9 CAPLUS
CN [1,3]Benzodioxolo[5,6-c]phenanthridinium, 1,2-dimethoxy-12-methyl- (9CI) (CA INDEX NAME)

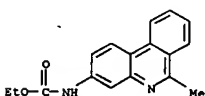


RE.CNT 28 THERE ARE 28 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L16 ANSWER 74 OF 8218 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

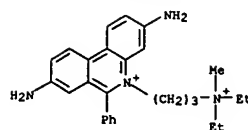
L16 ANSWER 75 OF 8218 CAPLUS COPYRIGHT 2005 ACS ON STN
 AN 2000:35983 CAPLUS
 DN 132:331490
 TI Near-infrared femtosecond laser pulses as a novel non-invasive means for dye-permeation and 3D imaging of localized dye-coupling in the Arabidopsis root meristem
 AU Tirlapur, Uday K.; Konig, Karsten
 CS Institute of Anatomy II, Friedrich Schiller University Jena, Jena, D-07743, Germany
 SO Plant Journal (1999), 20(3), 363-370
 CODEN: PLJUED; ISSN: 0960-7412
 PB Blackwell Science Ltd.
 DT Journal
 LA English
 AB We have used near-IR femtosecond Titanium: Sapphire laser pulses as novel non-invasive means for dye loading into various cell types of the Arabidopsis root meristem, and by 3D imaging have assessed the extent of dye coupling between the meristematic cells. The post-embryonic primary root of Arabidopsis thaliana has an invariant ontogeny and fixed cellular organization which makes it an attractive model system to study developmental events involving cell fate determination, cellular differentiation and pattern formation. Local intercellular communication and local transmission of positional signals are likely to play a pivotal role in cell proliferation and regulation of differentiation. We have therefore examined the extent to which the constituent cells in the root meristem are symplastically coupled. Following laser-assisted loading of membrane impermeable fluorescent dye propidium iodide (PI) in single cells, we show by time-lapse and 3D imaging that in the root tip all undifferentiated cells are dye-coupled. When PI is permeated into the central cells, it rapidly moved into the adjacent initials of the columella, cortex, pericycle and stele. Interestingly, when only either of the initials were loaded with the dye, it never moved into any of the central cells. Amongst the epidermal cells, the differentiated hair cells are symplastically isolated. Our data provide evidence (1) for differential dye-coupling behavior between quiescent center cells and the neighboring initials; (2) that cells in the root are coupled during stages at which the cell-lineage pattern is formed and that it becomes progressively secluded as they differentiate and the pattern is fixed. Taken together, our NIR-laser mediated approach is highly efficient and has numerous potential applications for non-invasive permeation of dyes in different cell types.
 IT 25535-16-4, Propidium iodide
 ANST RL: ARG (Analytical reagent use); BUU (Biological use, unclassified); (Analytical study); BIOL (Biological study); USES (Uses) (near-IR femtosecond laser pulses as a novel non-invasive means for dye-permeation and 3D imaging of localized dye-coupling in Arabidopsis root meristem)
 RN 25535-16-4 CAPLUS
 CN Phenanthridinium, 3,8-diamino-5-[3-(diethylmethylammonio)propyl]-6-phenyl-, diiodide (8CI, 9CI) (CA INDEX NAME)

L16 ANSWER 76 OF 8218 CAPLUS COPYRIGHT 2005 ACS ON STN
 AN 2000:33949 CAPLUS
 DN 132:222519
 TI Lariat ethers with pendant phenanthridine units. Synthesis and complexation of Na- and K-picrate
 AU Alihodzic, Sulejman; Zinic, Mladen
 CS Laboratory for Supramolecular and Nucleoside Chemistry, Department of Organic Chemistry and Biochemistry, Rudjer Boskovic Institute, Zagreb, HR-10001, Croatia
 SO Croatica Chemica Acta (1999), 72(4), 803-817
 CODEN: CCHCAJ; ISSN: 0011-1643
 PB Croatian Chemical Society
 DT Journal
 LA English
 AB Lariat ethers with appended phenanthridine fluorophoric units were prepared as potential fluorescent chemosensor mols. for alkaline metal salts possessing aromatic anions. The starting 8-ethyloxycarbonylamino-6-methylphenanthridine was converted to N-(2-tosylethyl) deriva. suitable for N-alkylation of diaza- and aza-18-crown-6. However, the alkylation failed, giving a 2-oxazolidinone derivative formed by intramol. cyclization of phenanthridine N-carbamate intermediates under basic conditions. A phenanthridine derivative having benzyl instead carbamate protection on the 8-amino group was successfully alkylated using mono- and diaza-crown ethers, giving lariat ethers. Subsequently, benzyl protective groups were removed under acidic conditions. One of the target lariat ethers was found to form unique Na- and K-picrate complexes with the metal cation bound in the crown cavity and picrate anion intercalated between phenanthridine units.
 IT 261166-70-5
 RL: RCT (Reactant); RACT (Reactant or reagent) (preparation and complexation behavior of lariat ethers with pendant phenanthridine units)
 RN 261166-70-5 CAPLUS
 CN Carbamic acid, (6-methyl-3-phenanthridinyl)-, ethyl ester (9CI) (CA INDEX NAME)



IT 261166-71-6P 261166-72-7P 261166-73-8P
 261166-74-9P 261166-75-0P 261166-76-1P
 261166-77-2P 261166-78-3P 261166-79-4P
 261166-81-5P 261166-83-0P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent) (preparation and complexation behavior of lariat ethers with pendant phenanthridine units)
 RN 261166-71-6 CAPLUS
 CN Carbamic acid, (6-methyl-3-phenanthridinyl)-[2-(triphenylmethoxy)ethyl]-,

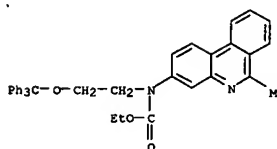
L16 ANSWER 75 OF 8218 CAPLUS COPYRIGHT 2005 ACS ON STN (Continued)



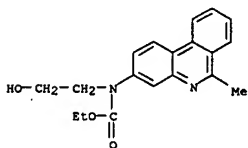
● 2 I⁻

RE.CNT 36 THERE ARE 36 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

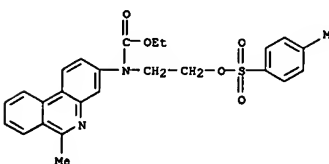
L16 ANSWER 76 OF 8218 CAPLUS COPYRIGHT 2005 ACS ON STN (Continued)
 ethyl ester (9CI) (CA INDEX NAME)



RN 261166-72-7 CAPLUS
 CN Carbamic acid, (2-hydroxyethyl)-(6-methyl-3-phenanthridinyl)-, ethyl ester (9CI) (CA INDEX NAME)

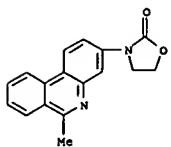


RN 261166-73-8 CAPLUS
 CN Carbamic acid, (6-methyl-3-phenanthridinyl)-[2-((4-methylphenyl)sulfonyl)oxy]ethyl]-, ethyl ester (9CI) (CA INDEX NAME)

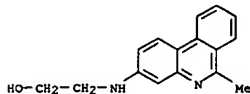


RN 261166-74-9 CAPLUS
 CN 2-Oxazolidinone, 3-(6-methyl-3-phenanthridinyl)- (9CI) (CA INDEX NAME)

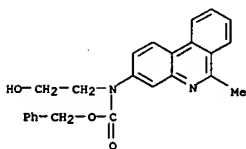
L16 ANSWER 76 OF 8218 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



RN 261166-75-0 CAPLUS
CN Ethanol, 2-[(6-methyl-3-phenanthridinyl)amino]- (9CI) (CA INDEX NAME)

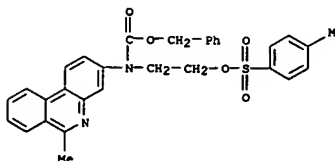


RN 261166-76-1 CAPLUS
CN Carbamic acid, (2-hydroxyethyl) (6-methyl-3-phenanthridinyl)-, phenylmethyl ester (9CI) (CA INDEX NAME)

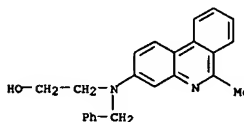


RN 261166-77-2 CAPLUS
CN Carbamic acid, [6-methyl-3-phenanthridinyl] [2-[(4-methylphenyl)sulfonyl]oxy]ethyl]-, phenylmethyl ester (9CI) (CA INDEX NAME)

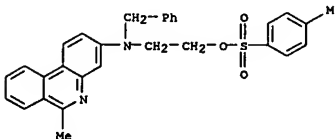
L16 ANSWER 76 OF 8218 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



RN 261166-78-3 CAPLUS
CN Ethanol, 2-[(6-methyl-3-phenanthridinyl) (phenylmethyl)amino]- (9CI) (CA INDEX NAME)



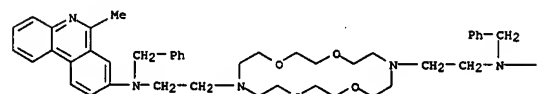
RN 261166-79-4 CAPLUS
CN Ethanol, 2-[(6-methyl-3-phenanthridinyl) (phenylmethyl)amino]-, 4-methylbenzenesulfonate (ester) (9CI) (CA INDEX NAME)



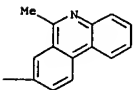
RN 261166-81-8 CAPLUS
CN 1,4,10,13-Tetraoxa-7,16-diazacyclooctadecane-7,16-diethanamine, N,N'-bis(6-methyl-8-phenanthridinyl)-N,N'-bis(phenylmethyl)- (9CI) (CA INDEX NAME)

L16 ANSWER 76 OF 8218 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

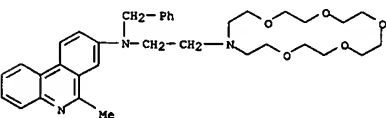
PAGE 1-A



PAGE 1-B

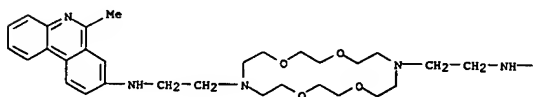


RN 261166-83-0 CAPLUS
CN 8-Phenanthridinamine, 6-methyl-N-[2-[(1,4,7,10,13-pentaoxa-16-azacyclooctadec-16-yl)ethyl]-N-(phenylmethyl)]- (9CI) (CA INDEX NAME)



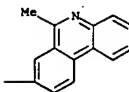
IT 261166-82-9P 261166-84-1P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation and complexation behavior of lariat ethers with pendant phenanthridine units)
RN 261166-82-9 CAPLUS
CN 1,4,10,13-Tetraoxa-7,16-diazacyclooctadecane-7,16-diethanamine, N,N'-bis(6-methyl-8-phenanthridinyl)- (9CI) (CA INDEX NAME)

PAGE 1-A

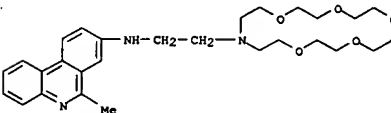


L16 ANSWER 76 OF 8218 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

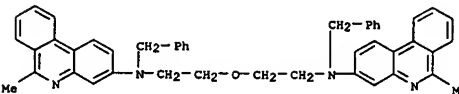
PAGE 1-B



RN 261166-84-1 CAPLUS
CN 8-Phenanthridinamine, 6-methyl-N-[2-[(1,4,7,10,13-pentaoxa-16-azacyclooctadec-16-yl)ethyl]-N-(phenylmethyl)]- (9CI) (CA INDEX NAME)



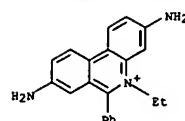
IT 261166-80-7P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)
RN 261166-80-7 CAPLUS
CN 3-Phenanthridinamine, N,N'-(oxydi-2,1-ethanediyl)bis[6-methyl-N-(phenylmethyl)]- (9CI) (CA INDEX NAME)



RE.CNT 19 THERE ARE 19 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

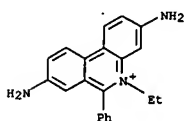
L16 ANSWER 77 OF 8218 CAPLUS COPYRIGHT 2005 ACS ON STN
 AN 2000:31927 CAPLUS
 DN 132:54473
 TI In situ enumeration of total counts and numbers of physiologically active bacterial cells in groundwater using fluorescent staining methods
 AU Murase, Akifumi; Uchiyama, Tomoji; Yamaguchi, Nobuyasu; Nasu, Masao
 CS Environmental Sci. Microbiology, Osaka Univ., Suita, 565-0871, Japan
 SO Bokin Bobai (1999), 27(12), 785-792
 CODEN: BOBODP; ISSN: 0385-5201
 PB Nippon Bokin Bobai Gakkai
 DT Journal
 LA Japanese
 AB An in situ method with fluorescent dyes was applied to enumerate the total counts and the nos. of physiol. active bacterial cells in groundwater and the water of a water culture system. Ethidium bromide (EtBr), which is specific for double-stranded nucleic acid, was used to determine total bacterial nos., and 6-carboxyfluorescein diacetate (6CFDA) was chosen for direct epifluorescent microscopic detection of physiol. active bacteria. In groundwater samples, the total bacterial number was 8×10^3 approx. 2×10^6 cells/mL, and colony forming units on R2A media were 0. approx. 2×10^5 cells/mL. Bacterial nos. determined by 6CFDA-EtBr double staining were much higher than those obtained by conventional plate counting in most samples. This double staining method is available for microbiol. evaluation of groundwater. Bacterial number was high in the groundwater of unused or uncovered wells. Bacterial contamination should be decreased by the frequent use of well water and restraint of inflows of rainwater. In the case of a water culture system, the number of esterase-active bacteria increased to 2.0×10^6 cells/mL (equivalent to 40% of total bacterial cells), which was 14,000 times as many as that in original water, after one month of culture. In addition, Escherichia coli O157 : H7 was detected in the culture solution by direct fluorescent antibody staining. These results were attributed to insufficient water quality control during cultivation, and suggested that the quality of culture solution should be controlled pos. during water culture to avoid bacterial hazards.
 IT 1239-45-8, Ethidium bromide
 RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses) (in situ enumeration of total counts and nos. of physiol. active bacterial cells in groundwater using fluorescent staining)
 RN 1239-45-8 CAPLUS
 CN Phenanthridinium, 3,8-diamino-5-ethyl-6-phenyl-, bromide (8CI, 9CI) (CA INDEX NAME)

L16 ANSWER 77 OF 8218 CAPLUS COPYRIGHT 2005 ACS ON STN (Continued)



● Br⁻

L16 ANSWER 78 OF 8218 CAPLUS COPYRIGHT 2005 ACS ON STN
 AN 2000:30180 CAPLUS
 DN 132:118910
 TI Intercalation-induced changes in DNA supercoiling observed in real-time by atomic force microscopy
 AU Pope, L. H.; Davies, M. C.; Laughton, C. A.; Roberts, C. J.; Tendler, S. J. B.; Williams, P. M.
 CS Laboratory of Biophysics and Surface Analysis, School of Pharmaceutical Sciences, The University of Nottingham, Nottingham, NG7 2RD, UK
 SO Analytica Chimica Acta (1999), 400(1-3), 27-32
 CODEN: ACACAM; ISSN: 0003-2670
 PB Elsevier Science B.V.
 DT Journal
 LA English
 AB Atomic force microscopy (AFM) has been employed to observe in real-time and in an aqueous environment the process of ethidium bromide induced supercoiling in individual DNA plasmid mols. Image data reveal both the onset and the progressive presence of plectonemic DNA supercoiling. In addition, significant mol. motion of the surface adsorbed DNA is observed. These data illustrate the potential of AFM in the time-resolved study of biomol. processes, and hence, provide new insights into biomol. structure and function.
 IT 1239-45-8, Ethidium bromide
 RL: PEP (Physical, engineering or chemical process); RCT (Reactant); PROC (Process); RACT (Reactant or reagent) (intercalation-induced changes in DNA supercoiling observed in real-time by atomic force microscopy)
 RN 1239-45-8 CAPLUS
 CN Phenanthridinium, 3,8-diamino-5-ethyl-6-phenyl-, bromide (8CI, 9CI) (CA INDEX NAME)

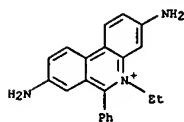


● Br⁻

RE.CNT 26 THERE ARE 26 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

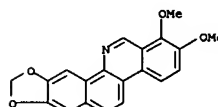
L16 ANSWER 79 OF 8218 CAPLUS COPYRIGHT 2005 ACS ON STN
 AN 2000:30036 CAPLUS
 DN 132:292162
 TI Activation and proliferation of endogenous oligodendrocyte precursor cells during ethidium bromide-induced demyelination
 AU Levine, Joel M.; Reynolds, Richard
 CS Department of Neurobiology and Behavior, SUNY at Stony Brook, Stony Brook, NY, USA
 SO Experimental Neurology (1999), 160(2), 333-347
 CODEN: EXNEAC; ISSN: 0014-4886
 PB Academic Press
 DT Journal
 LA English
 AB The adult brain contains a large population of glial cells with the properties of oligodendrocyte precursor cells (OPCs). The functions of this newly recognized class of glial cells in normal animals are unknown. Here, the authors analyzed the reactions of OPCs to a transient demyelination of the rat brainstem induced by the injection of ethidium bromide (EB) into the fourth ventricle. Within 22 h after EB injection, there is a 21% decrease in the number of OPCs within affected fiber tracts such as the spinal tract of the trigeminal nerve, most likely reflecting the toxic actions of EB. The surviving OPCs had enlarged cell bodies with fewer long processes and many membrane blebs. By 2 days after EB injection, these reactive OPCs had incorporated BrdU and increased in number. The increase in OPC cell number reached a maximum between 6-10 days after EB injection, at which time demyelination was complete. Myelin-specific marker antigens reappeared beginning at 12 days postinjection and the remyelination continued for up to 40 days. During remyelination, OPCs displayed a normal stellate morphol. with an increased number of thin processes, many of which were closely associated with neurofilament-pos. axonal profiles. The transient increase in the number of reactive OPCs within the demyelinated tissue and subsequent decrease in OPC number during remyelination demonstrates that the endogenous oligodendrocyte precursor population responds rapidly to the pathophysiol. state of the brain. Demyelination generates a sufficient number of OPCs to participate in the repair of the demyelinated lesions. (c) 1999 Academic Press.
 IT 1239-45-8, Ethidium bromide
 RL: ADV (Adverse effect, including toxicity); BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses) (activation and proliferation of endogenous oligodendrocyte precursor cells during ethidium bromide-induced demyelination)
 RN 1239-45-8 CAPLUS
 CN Phenanthridinium, 3,8-diamino-5-ethyl-6-phenyl-, bromide (8CI, 9CI) (CA INDEX NAME)

L16 ANSWER 79 OF 8218 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

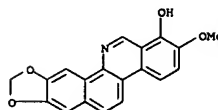
● Br⁻RE.CNT 58 THERE ARE 58 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L16 ANSWER 80 OF 8218 CAPLUS COPYRIGHT 2005 ACS on STN

AN 2000:27049 CAPLUS
DN 132:180747
TI On the mechanism of thermolysis of the benzo[c]phenanthridine alkaloid chelerythrine
AU Tolkachev, O. N.; Savina, A. A.; Sheichenko, V. I.; Proskudina, V. V.
CS Research and Production Corporation "State Research Institute of Medical and Aromatic Plants" (VILAR), Moscow, Russia
SO Pharmaceutical Chemistry Journal (Translation of Khimiko-Farmatsevticheskii Zhurnal) (1999), 33(6), 323-325
CODEN: PCJQAU; ISSN: 0091-150X
PB Consultants Bureau
DT Journal
LA English
AB Thermolysis of chelerythrine bisulfate proceeds by competitive O- and N-demethylation corresponding to the heteroatom sites possessing maximum pos. charge in their resp. resonance structures.
IT 6900-99-8, O-Methyldecarine 66855-60-5, Isodecarine
RL: FMU (Formation, unclassified); FORM (Formation, nonpreparative)
(On the mechanism of thermolysis of the benzo[c]phenanthridine alkaloid chelerythrine)
RN 6900-99-8 CAPLUS
CN [1,3]Benzodioxolo[5,6-c]phenanthridine, 1,2-dimethoxy- (6CI, 9CI) (CA INDEX NAME)



RN 66855-60-5 CAPLUS
CN [1,3]Benzodioxolo[5,6-c]phenanthridin-1-ol, 2-methoxy- (9CI) (CA INDEX NAME)



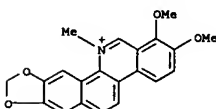
IT 53144-45-9, Chelerythrine bisulfate
RL: PEP (Physical, engineering or chemical process); RCT (Reactant); PROC (Process); RACT (Reactant or reagent)
(On the mechanism of thermolysis of the benzo[c]phenanthridine alkaloid)

L16 ANSWER 80 OF 8218 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

chelerythrine)
RN 53144-45-9 CAPLUS
CN [1,3]Benzodioxolo[5,6-c]phenanthridinium, 1,2-dimethoxy-12-methyl-, sulfate (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 34316-15-9
CMF C21 H18 N O4



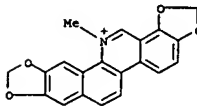
CM 2

CRN 14996-02-2
CMF H O4 S

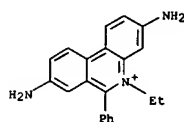
RE.CNT 16 THERE ARE 16 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L16 ANSWER 81 OF 8218 CAPLUS COPYRIGHT 2005 ACS on STN

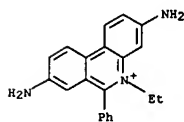
AN 2000:26541 CAPLUS
DN 132:177559
TI Spectrophotometric method of sanguinarine detection in the biomass of Macleaya cordata cells
AU Fonin, V. S.; Taybul'ko, N. S.; Tolkachev, O. N.
CS All-Russian Research Institute of Medicinal and Aromatic Plants, Russian Academy of Agricultural Sciences, Moscow, 113628, Russia
SO Prikladnaya Biokhimiya i Mikrobiologiya (1999), 35(4), 468-472
CODEN: PEMIAK; ISSN: 0555-1099
PB MAIK Nauka
DT Journal
LA Russian
AB A method for quant. determination of sanguinarine is described, whereby the content of the alkaloid can be measured in the biomass of Macleaya cordata. For this, the biomass is treated with ammonia, after which the alkaloids are extracted with chloroform and separated by TLC (standard silica plates), using a 25:25:3 (volume/volume/v) mixture of di-Et ether, petroleum ether, and methanol, resp., as the solvent system. The exts. thus obtained are then subjected to spectrophotometry.
IT 2447-54-3, Sanguinarine
RL: ANT (Analyte); BOC (Biological occurrence); BSU (Biological study, unclassified); ANST (Analytical study); BIOL (Biological study); OCCU (Occurrence)
(spectrophotometric method of sanguinarine detection in biomass of Macleaya cordata cells)
RN 2447-54-3 CAPLUS
CN [1,3]Benzodioxolo[5,6-c]-1,3-dioxolo[4,5-i]phenanthridinium, 13-methyl- (9CI) (CA INDEX NAME)



L16 ANSWER 82 OF 8218 CAPLUS COPYRIGHT 2005 ACS ON STN
 AN 2000:18408 CAPLUS
 DN 132:248419
 TI Resistance of *Bacillus subtilis* to anthracyclines
 AU Tang, Xinyun; De Rossi, Edda; Ciferri, Orio
 CS Bioengineering Department, Anhui Agricultural University, Hefei, 230036, Peop. Rep. China
 SO Zhonghua Weishengwuxue He Mianyixue Zazhi (1999), 19(3), 188-191
 CODEN: ZWMZDP; ISSN: 0254-5101
 PB Weishenbu Beijing Shengwu Zhipin Yanjiusuo
 DT Journal
 LA Chinese
 AB A study was carried out to explore the resistance of *Bacillus subtilis* to anthracycline and to clone the fragment responsible for resistance. Spontaneous mutants of strain 1831 of *Bacillus subtilis* resistant to anthracyclines (ANC) were isolated by selection on LB plates containing increasing concns. of doxorubicin (up to 100 µg/mL). These mutants were cross-resistant towards chemical-unrelated compds. such as ethidium bromide and rhodamine. In the presence of a calcium channel blocker, verapamil, mutant DM104 became as sensitive to inhibition by doxorubicin as the parental strain. Four recombinant plasmids containing different fragments of DM104 DNA were obtained by direct gene cloning in protoplasts of *B. subtilis* BD224 strain, with only one fragment homologous to the known *bmr* gene of *B. subtilis*. The sensitive strain BD224 became resistant to ANC after retransformation by recombinant plasmids. These data indicate the multidrug resistance mechanism of the mutants; the resistance may involve addnl. loci.
 IT 1239-45-8, Ethidium bromide
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study) (multidrug resistance of *Bacillus subtilis* anthracycline-resistant mutant)
 RN 1239-45-8 CAPLUS
 CN Phenanthridinium, 3,8-diamino-5-ethyl-6-phenyl-, bromide (8CI, 9CI) (CA INDEX NAME)

● Br⁻

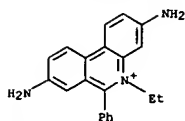
L16 ANSWER 83 OF 8218 CAPLUS COPYRIGHT 2005 ACS ON STN (Continued)

● Br⁻

L16 ANSWER 83 OF 8218 CAPLUS COPYRIGHT 2005 ACS ON STN
 AN 2000:14058 CAPLUS
 DN 132:320086
 TI Treatment of synchronized cells K562 by tetrafluoroaluminate does not modulate the fluorescence of ethidium bromide and 4',6-diamidine-2-phenylindole upon binding with nucleoid DNA
 AU Anisimov, A. G.; Bolotnikov, I. A.
 CS Department of Biochemistry, Petrozavodsk State University, Russia
 SO Tsitologiya (1999), 41(8), 680-684
 CODEN: TSITAQ; ISSN: 0041-3771
 PB Nauka
 DT Journal
 LA Russian
 AB Earlier we showed that 4-h treatment of cells K562 with the GTP-binding protein activator AlF₄- (10 mM NaF + 20 µM ALC13) increased DNA fragmentation on an average to 51 of the total 3H-thymidine-labeled DNA. The viability of cells under these conditions did not change. It has been suggested that toxic action of AlF₄- is a result of cell proliferation inhibition. In the present work we tried to determine possible changes in the ethidium bromide and 4',6-diamidine-2-phenylindole (DAPI) fluorescence when they bind with nucleoid DNA of synchronized cells K562 treated with AlF₄-. Cells K562 were incubated for synchronization with 2 mM thymidine during 15 h. Under these conditions DNA synthesis (3H-thymidine uptake) was suppressed by 94-99 %. It has been found that the treatment of "cool" thymidine-incubated cells K562 with AlF₄- did not change the fluorescence of either ethidium or DAPI. The presence of phorbol-12-myristate-13-acetate (PMA) in the incubation medium did not influence the results. On the other, hand the rat thymocytes incubated with dexamethazone (2 µM) during 4 h (pos. control of DNA fragmentation) demonstrated an increase in both parameters. PMA decreased the ethidium fluorescence that correspond to its (PMA) ability to suppress fragmentation of thymocyte DNA. On the basis of the results we suggested that AlF₄- did not induce DNA fragmentation in the cells K562 with the blocked DNA synthesis.
 IT 1239-45-8, Ethidium bromide
 RL: ARG (Analytical reagent use); BSU (Biological use, unclassified); ANST (Analytical study); BIOL (Biological study); USES (Uses) (treatment of synchronized cells K562 by tetrafluoroaluminate does not modulate fluorescence of ethidium bromide and 4',6-diamidine-2-phenylindole under binding with nucleoid DNA)
 RN 1239-45-8 CAPLUS
 CN Phenanthridinium, 3,8-diamino-5-ethyl-6-phenyl-, bromide (8CI, 9CI) (CA INDEX NAME)

L16 ANSWER 84 OF 8218 CAPLUS COPYRIGHT 2005 ACS ON STN
 AN 2000:12269 CAPLUS
 DN 132:160772
 TI Interaction between antitumor drugs and a double-stranded oligonucleotide studied by electrospray ionization mass spectrometry
 AU Gabelica, Valerie; De Pauw, Edwin; Rosu, Frederic
 CS Mass Spectrometry Laboratory, Chemistry Institute B6c, University of Liege, Liege, B-4000, Belg.
 SO Journal of Mass Spectrometry (1999), 34(12), 1328-1337
 CODEN: JMSPFJ; ISSN: 1076-5174
 PB John Wiley & Sons Ltd.
 DT Journal
 LA English
 AB Electrospray ionization mass spectrometry was used to investigate the complex formation between a double-stranded oligonucleotide and various antitumor drugs belonging to two categories: intercalators (ethidium bromide, amsacrine and ascididemin) and minor groove binders (Hoechst 33258, netropsin, distamycin A, berenil and DAPI). The goal of this study was to determine whether the relative intensities in the mass spectra reflect the relative abundances of the species in the solution phase. The full-scan mass spectra suggest non-specific binding for the intercalators and specific binding for the minor groove binders. The preferential stoichiometries adopted by each minor groove binder were determined by studying the influence of the drug concentration on the spectra. We obtained 2:1>1:1 for distamycin, 1:1>2:1 for Hoechst 33258 and DAPI and only the 1:1 complex for netropsin and berenil. These features reflect their known behavior in solution. The compared tandem mass spectra of the 1:1 complexes with Hoechst 33258 and netropsin, when correlated with published crystallog. data, suggest the possibility of inferring some structural information. The relative binding affinities of the drug for the considered duplex were deduced with two by two competition expts., assuming that the relative intensities reflect the composition of the solution phase. The obtained affinity scale is netropsin > distamycin A > DAPI > Hoechst 33258 > berenil. These examples show some of the potential uses of mass spectrometry as a useful tool for the characterization of specific drug binding to DNA, and possibly a rapid drug screening method requiring small amts. of materials.
 IT 3546-21-2, Ethidium
 RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process) (interaction between antitumor drugs and a double-stranded oligonucleotide studied by electrospray ionization mass spectrometry)
 RN 3546-21-2 CAPLUS
 CN Phenanthridinium, 3,8-diamino-5-ethyl-6-phenyl-, bromide (8CI, 9CI) (CA INDEX NAME)

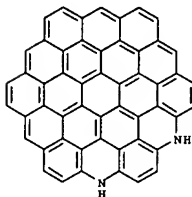
L16 ANSWER 84 OF 8218 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



RE.CNT 70 THERE ARE 70 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L16 ANSWER 85 OF 8218 CAPLUS COPYRIGHT 2005 ACS on STN

AN 2000:11115 CAPLUS
DN 132:154274
TI Molecular orbital calculations on lithium absorption in boron- or nitrogen-substituted disordered carbon
AU Kurita, Noriyuki
CS Department of Knowledge-Based Information Engineering, Toyohashi University of Technology, Toyohashi, 441-8580, Japan
SO Carbon (1999), Volume Date 2000, 38(1), 65-75
CODEN: CRBNAH; ISSN: 0008-6223
PB Elsevier Science Ltd.
DT Journal
LA English
AB In order to clarify the reason why boron-substituted disordered carbons can store more Li atoms than pristine carbons, we employed several polyarom. hydrocarbons as model clusters for disordered carbons and investigated the effect of boron and nitrogen substitutions on the stable structures and electronic properties of model clusters, by using a semiempirical MO method. Boron substitution creates an electron acceptor level in a lower energy region than that for the pristine carbon. This lower acceptor-level accepts electrons from the absorbed Li more easily, so that the Li absorption energy for the boron-substituted cluster is much larger than that for the pristine carbon. On the other hand, for the nitrogen-substituted clusters, the electron acceptor level is almost the same as that for the pristine carbon, so that the Li absorption energy is not enhanced by nitrogen-substitution. These results suggest that the larger Li-storage in boron-substituted disordered carbons is related to the creation of a lower acceptor-level caused by boron substitution.
IT 257868-51-2 257868-55-6
RL FRP (Properties); TEM (Technical or engineered material use); USES (Uses)
(model compound; MO calcs. on lithium absorption in boron- or nitrogen-substituted disordered carbon)
RN 257868-51-2 CAPLUS
CN Benzo[lmn]pentapheno[2'',1'',14'',13'',12'',11'':4',5',6',7',8',9']pentapheno[2',1',14',13',12',11'':4,5,6,7,8,9]pentapheno[1,14,13,12-cdefghi][2,9]phenanthroline, 3,6-dihydro- (9CI) (CA INDEX NAME)



L16 ANSWER 85 OF 8218 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

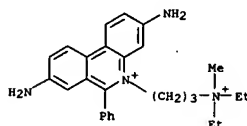
RN 257868-55-6 CAPLUS
CN 3,7-Diazabenzonaphthaceno[2'',1'',12'',11'',10'',9'':4',5',6',7',8']pentaceno[2',1',14',13',12',11'':4,5,6,7,8,9]hexaceno[2,1,16,15,14,13,12,11-defghijklmno:2',1',16',15',14',13',12',11'-stuvwxyzabclcdl]heptacene, 3,7-dihydro- (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

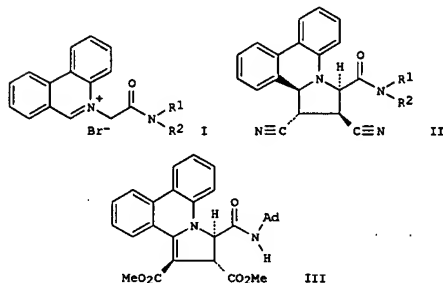
RE.CNT 19 THERE ARE 19 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L16 ANSWER 86 OF 8218 CAPLUS COPYRIGHT 2005 ACS on STN

AN 2000:7076 CAPLUS
DN 132:345088 CAPLUS
TI DNA content analysis and DNA strand breaks labeling method for detecting necrotic and apoptotic cells
AU Tao, Deding; Shu, Dan; Gong, Jianping
CS Molecular Medical Center, Tongji Hospital, Tongji Medical University, Wuhan, 430030, Peop. Rep. China
SO Zhonghua Yixue Jianshan Zazhi (1999), 22(6), 344-346
CODEN: CHCCDO; ISSN: 0253-973X
PB Zhonghua Yixuehui Zazhishe
DT Journal
LA Chinese
AB The necrotic and apoptotic cells were detected effectively and simply by flow cytometry. Necrotic or apoptotic HL-60 cells which were induced by thermodyn., camptothecin and UV radiation were analyzed with propidium iodide (PI) absorption test, Sub-G1 and Tdt method. The effect of the methods were compared. Dead cells absorbed a mass of PI. The relative fluorescence intensity was higher in dead cells than that in live cells
on DNA histogram. Apoptotic cells treated with phosphate-citric acid buffer were distinguished by extra Sub-G1 peak ahead of G1 peak on DNA histogram, but it was difficult to detect apoptosis for those not treated with PC. The mean fluorescence intensity of necrotic cells was 3-fold of the control after labeled with Tdt method, meanwhile, the mean fluorescence intensity of apoptotic cells increased apparently. The necrotic and apoptotic cells can be detected efficiently by the method of PI uptake, Sub-G1 and Tdt.
IT 25535-16-4, Propidium iodide
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
(DNA content anal. and DNA strand breaks labeling method for detecting necrotic and apoptotic cells)
RN 25535-16-4 CAPLUS
CN Phenanthridinium, 3,8-diamino-5-[3-(diethylmethylammonio)propyl]-6-phenyl-, diiodide (8CI, 9CI) (CA INDEX NAME)



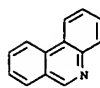
L16 ANSWER 87 OF 8218 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 2000:5235 CAPLUS
 DN 132:180468
 TI Reactions of a new family of amide derivatives of phenanthridinium
 azomethine ylides with dipolarophiles
 AU Travnicek, Martin; Pospisil, Jiri; Potacek, Milan
 CS Department of Organic Chemistry, Faculty of Sciences, Masaryk University,
 Brno, 602 00, Czech Rep.
 SO Collection of Czechoslovak Chemical Communications (1999),
 64(12), 1993-2006
 CODEN: CCCCAK; ISSN: 0010-0765
 PB Institute of Organic Chemistry and Biochemistry, Academy of Sciences of
 the Czech Republic
 DT Journal
 LA English
 OS CASREACT 132:180468
 GI



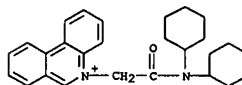
AB Reaction of alkylbromoacetamides R1R2NCOCH2Br [R1, R2 = cyclohexyl,
 cyclohexyl; 1-Pr, 1-Pr; 1-adamantyl, H; benzyl, H; 1-(1-adamantyl)ethyl,
 H] with phenanthridine gave quaternary phenanthridinium salts I. I were
 treated with Et3N to form azomethine ylides which underwent cycloaddn.
 reactions with activated alkenes, e.g. fumaronitrile and di-Me fumarate,
 to give (alkylcarbamoyl)pyrrolophenanthridines, e.g., II and III (Ad =
 1-adamantyl). The relative configurations of the cycloadducts were
 studied by NMR spectroscopy. The best results were obtained with
 fumaronitrile as a dipolarophile. The ylides react in syn conformations
 but if a 1-adamantyl moiety is bound to the ylide, it reacts in anti
 conformation also. The azomethine ylides show a very poor reactivity
 towards di-Me fumarate or di-Me maleate.

IT 229-87-8, Phenanthridine
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (preparation of pyrrolophenanthridinecarboxamides via cycloaddn. of

L16 ANSWER 87 OF 8218 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)
 (carbamoylmethyl)phenanthridinium azomethine ylides with
 dipolarophiles
 RN 229-87-8 CAPLUS
 CN Phenanthridine (6CI, 8CI, 9CI) (CA INDEX NAME)

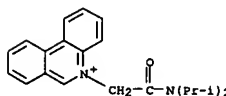


IT 259267-77-1P 259267-78-2P 259267-79-3P
 259267-80-6P 259267-81-7P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
 (Reactant or reagent)
 (preparation of pyrrolophenanthridinecarboxamides via cycloaddn. of
 (carbamoylmethyl)phenanthridinium azomethine ylides with
 dipolarophiles)
 RN 259267-77-1 CAPLUS
 CN Phenanthridinium, 5-[2-(dicyclohexylamino)-2-oxoethyl]-, bromide (9CI)
 (CA INDEX NAME)



● Br⁻

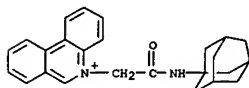
RN 259267-78-2 CAPLUS
 CN Phenanthridinium, 5-[2-(bis(1-methylethyl)amino)-2-oxoethyl]-, bromide
 (9CI) (CA INDEX NAME)



● Br⁻

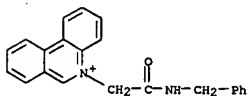
L16 ANSWER 87 OF 8218 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

RN 259267-79-3 CAPLUS
 CN Phenanthridinium, 5-[2-oxo-2-(tricyclo[3.3.1.1.3,7]dec-1-ylamino)ethyl]-,
 bromide (9CI) (CA INDEX NAME)



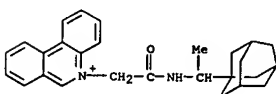
● Br⁻

RN 259267-80-6 CAPLUS
 CN Phenanthridinium, 5-[2-oxo-2-(phenylmethylamino)ethyl]-, bromide (9CI)
 (CA INDEX NAME)



● Br⁻

RN 259267-81-7 CAPLUS
 CN Phenanthridinium, 5-[2-oxo-2-((1-tricyclo[3.3.1.1.3,7]dec-1-yl
 ethyl)amino)ethyl]-, bromide (9CI) (CA INDEX NAME)



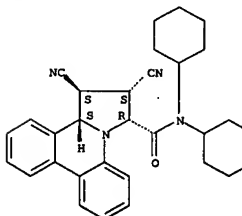
● Br⁻

IT 259267-82-8P 259267-83-9P 259267-84-0P
 259267-85-1P 259267-86-2P 259267-87-3P
 259267-88-4P 259267-89-5P 259267-90-6P
 259267-91-6P 259267-92-0P 259267-93-1P
 259267-94-2P

L16 ANSWER 87 OF 8218 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

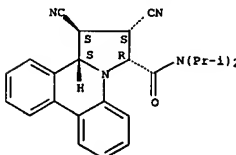
RL: SPN (Synthetic preparation); PREP (Preparation)
 (preph. of pyrrolophenanthridinecarboxamides via cycloaddn. of
 (carbamoylmethyl)phenanthridinium azomethine ylides with
 dipolarophiles)
 RN 259267-82-8 CAPLUS
 CN Pyrrolo[1,2-f]phenanthridine-3-carboxamide, 1,2-dicyano-N,N-dicyclohexyl-
 1,2,3,12b-tetrahydro-, (1R,2R,3S,12bR)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.



RN 259267-83-9 CAPLUS
 CN Pyrrolo[1,2-f]phenanthridine-3-carboxamide, 1,2-dicyano-1,2,3,12b-
 tetrahydro-N,N-bis(1-methylethyl)-, (1R,2R,3S,12bR)-rel- (9CI) (CA INDEX
 NAME)

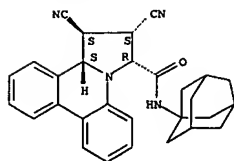
Relative stereochemistry.



RN 259267-84-0 CAPLUS
 CN Pyrrolo[1,2-f]phenanthridine-3-carboxamide, 1,2-dicyano-1,2,3,12b-
 tetrahydro-N-tricyclo[3.3.1.1.3,7]dec-1-yl-, (1R,2R,3S,12bR)-rel- (9CI)
 (CA INDEX NAME)

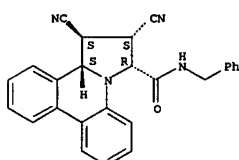
Relative stereochemistry.

L16 ANSWER 87 OF 8218 CAPLUS COPYRIGHT 2005 ACS ON STN (Continued)



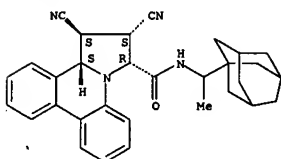
RN 259267-85-1 CAPLUS
CN Pyrrolo[1,2-f]phenanthridine-3-carboxamide, 1,2-dicyano-1,2,3,12b-tetrahydro-N-(phenylmethyl)-, (1R,2R,3S,12bR)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.



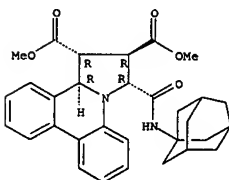
RN 259267-86-2 CAPLUS
CN Pyrrolo[1,2-f]phenanthridine-3-carboxamide, 1,2-dicyano-1,2,3,12b-tetrahydro-N-(1-tricyclo[3.3.1.1.3,7]dec-1-ylethyl)-, (1R,2R,3S,12bR)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.



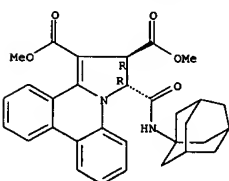
RN 259267-87-3 CAPLUS
CN Pyrrolo[1,2-f]phenanthridine-3-carboxamide, 1,2-dicyano-1,2,3,12b-tetrahydro-N-tricyclo[3.3.1.1.3,7]dec-1-yl-, (1R,2R,3R,12bR)-rel- (9CI)

L16 ANSWER 87 OF 8218 CAPLUS COPYRIGHT 2005 ACS ON STN (Continued)

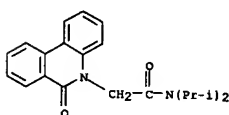


RN 259267-90-8 CAPLUS
CN Pyrrolo[1,2-f]phenanthridine-1,2-dicarboxylic acid, 2,3-dihydro-3-[(tricyclo[3.3.1.1.3,7]dec-1-ylamino)carbonyl]-, dimethyl ester, (2R,3R)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.



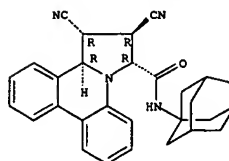
RN 259267-91-9 CAPLUS
CN 5(6H)-Phenanthridineacetamide, N,N-bis(1-methylethyl)-6-oxo- (9CI) (CA INDEX NAME)



RN 259267-92-0 CAPLUS
CN 5(6H)-Phenanthridineacetamide, 6-oxo-N-tricyclo[3.3.1.1.3,7]dec-1-yl- (9CI) (CA INDEX NAME)

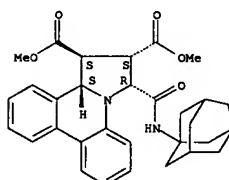
L16 ANSWER 87 OF 8218 CAPLUS COPYRIGHT 2005 ACS ON STN (Continued)

Relative stereochemistry.



RN 259267-88-4 CAPLUS
CN Pyrrolo[1,2-f]phenanthridine-1,2-dicarboxylic acid, 1,2,3,12b-tetrahydro-3-[(tricyclo[3.3.1.1.3,7]dec-1-ylamino)carbonyl]-, dimethyl ester, (1R,2R,3S,12bR)-rel- (9CI) (CA INDEX NAME)

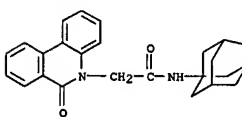
Relative stereochemistry.



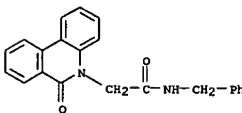
RN 259267-89-5 CAPLUS
CN Pyrrolo[1,2-f]phenanthridine-1,2-dicarboxylic acid, 1,2,3,12b-tetrahydro-3-[(tricyclo[3.3.1.1.3,7]dec-1-ylamino)carbonyl]-, dimethyl ester, (1R,2R,3R,12bR)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

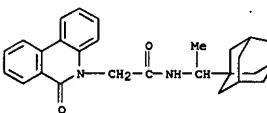
L16 ANSWER 87 OF 8218 CAPLUS COPYRIGHT 2005 ACS ON STN (Continued)



RN 259267-93-1 CAPLUS
CN 5(6H)-Phenanthridineacetamide, 6-oxo-N-(phenylmethyl)- (9CI) (CA INDEX NAME)

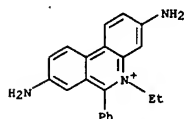


RN 259267-94-2 CAPLUS
CN 5(6H)-Phenanthridineacetamide, 6-oxo-N-(1-tricyclo[3.3.1.1.3,7]dec-1-ylethyl)- (9CI) (CA INDEX NAME)



RE.CMT 36 THERE ARE 36 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L16 ANSWER 88 OF 8218 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 2000:2586 CAPLUS
 DN 132:175433
 TI Porphyrins can catalyze the interconversion of DNA quadruplex structural types
 AU Arthanari, Haribabu; Bolton, Philip H.
 CS Chemistry Department, Wesleyan University, Middletown, CT, 06459, USA
 SO Anti-Cancer Drug Design (1999), 14(4), 317-326
 CODEN: ACDDEA; ISSN: 0266-9536
 PB Oxford University Press
 DT Journal
 LA English
 AB The binding of porphyrins to quadruplex DNAs provides a model system for the examination of drug binding to telomere, centromere, triplet repeat and other DNAs which may form quadruplex structures in vivo. Porphyrins, and certain other mols. that interact with quadruplex DNAs, have been shown to have significant biol. activity. In this investigation the interactions of porphyrins with quadruplex DNAs have been examined by optical and NMR methods. The fluorescence of selected porphyrins can be used to discriminate between duplex and quadruplex DNAs. The fluorescence of the porphyrins can also be used to discriminate partially between the chair, basket and parallel stranded types of quadruplex DNA. At the relatively high DNA concns. used in NMR, the porphyrins catalyze the conversion of both chair and basket type structures into parallel strand quadruplex DNAs. A DNA-porphyrin system has been found which appears to be a model for an intermediate of the catalytic pathway.
 IT 3546-21-2, Ethidium
 RL: BPR (Biological process); BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study); PROC (Process)
 (porphyrins can catalyze interconversion of DNA quadruplex structural types)
 RN 3546-21-2 CAPLUS
 CN Phenanthridinium, 3,8-diamino-5-ethyl-6-phenyl- (8CI, 9CI) (CA INDEX NAME)



RE.CNT 33 THERE ARE 33 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L16 ANSWER 90 OF 8218 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 1999:819571 CAPLUS
 DN 132:59136
 TI High-throughput methods, systems and apparatus for performing cell-based screening assays
 IN Wada, H. Garrett; Sundberg, Steven A.; Alajoki, Marja Liisa
 PA Caliper Technologies Corp., USA
 SO PCT Int. Appl., 81 pp.
 CODEN: PIXXD2
 DT Patent
 LA English
 FAN.CNT 2

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9967639	A1	19991229	WO 1999-US13918	19990621

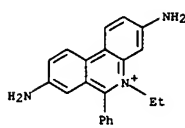
W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, GR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MW, MX, MY, NZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, SV, TH, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
 RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GN, GW, ML, MR, NE, SN, TD, TG
 AU 9949570 A1 20000110 AU 1999-49570 19990621

EP 1088229 A1 20010404 EP 1999-933529 19990621
 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI
 FRAI US 1998-104519 A 19980625
 US 1999-117370P P 19990127
 US 1998-117370P P 19990127
 WO 1999-US13918 W 19990621

AB Methods are disclosed for determining a function of cells, which comprises a suspension of cells flowing along a first fluid channel. The cells have a first detectable property associated therewith, and the cells produce a second detectable property upon activation of the function of the cells, the first and second detectable properties being distinguishable from each other. The levels of the first and second detectable properties are measured. The level of second detectable property is compared to the level of first detectable property to determine the relative function of the cells. The methodol. of the invention is useful in e.g. the drug discovery process.
 IT 3546-21-2D, Ethidium, derivs.
 RL: BUU (Biological use, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (ethidium dyes; high-throughput methods, systems and apparatus for performing cell-based screening assays)

RN 3546-21-2 CAPLUS
 CN Phenanthridinium, 3,8-diamino-5-ethyl-6-phenyl- (8CI, 9CI) (CA INDEX NAME)

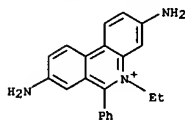
L16 ANSWER 89 OF 8218 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 2000:41 CAPLUS
 DN 132:133924
 TI Detection of telomerase activity by ethidium bromide
 AU Said, A. Saleh; Sun, Jian-long; Xie, Kuang-cheng; Chen, Zhao; Zhang, Bo-sheng; Ran, Da-ming
 CS Fudan University, Peop. Rep. China
 SO Fudan Xuebao, Ziran Kexueban (1999), 38(5), 568-571
 CODEN: FHPTAY; ISSN: 0427-7104
 PB Fudan Daxue Chubanshe
 DT Journal
 LA English
 AB Telomerase is a ribonucleoprotein enzyme adding telomeric repeats onto the ends of eukaryotic chromosomes to maintain telomeres that are essential for chromosomal stability. Telomerase activity has been detected in germline cells and immortalized cancer cells, but in normal cells is either low or undetectable. The Telomeric Repeat amplification Protocol (TRAP) assay had been modified to detect telomerase activity qual. by using ethidium bromide (EB). The present assay is sensitive, reliable and time-saving for the detection of telomerase activity in crude extract
 IT 1239-45-8, Ethidium bromide
 RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses)
 (detection of telomerase activity in cell lines and cancer tissue using ethidium bromide in telomeric repeat amplification protocol assay)
 RN 1239-45-8 CAPLUS
 CN Phenanthridinium, 3,8-diamino-5-ethyl-6-phenyl-, bromide (8CI, 9CI) (CA INDEX NAME)



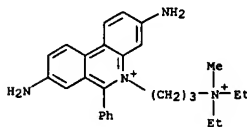
● Br⁻

RE.CNT 10 THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L16 ANSWER 90 OF 8218 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



IT 36015-30-2D, Propidium, derivs.
 RL: BUU (Biological use, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (propidium dyes; high-throughput methods, systems and apparatus for performing cell-based screening assays)
 RN 36015-30-2 CAPLUS
 CN Phenanthridinium, 3,8-diamino-5-[3-(diethylmethylammonio)propyl]-6-phenyl- (9CI) (CA INDEX NAME)



RE.CNT 16 THERE ARE 16 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L16 ANSWER 91 OF 8218 CAPLUS COPYRIGHT 2005 ACS on STN

AN 1999:819525 CAPLUS

DN 132:59141

TI $\beta(1,6)$ -glucan synthesis and cell wall assembly assay and use in detection of antifungal agents

IN Ostroff, Gary R.

PA Collaborative Group, Ltd., USA

SO PCT Int. Appl., 46 pp.

CODEN: P1XXD2

DT Patent

LA English

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 9967419	A1	19991229	WO 1999-US13434	19990615

<--

W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

AU 9945666	A1	20000110	AU 1999-45666	19990615
------------	----	----------	---------------	----------

<--

PRAI US 1998-104873 A1 19980625

WO 1999-US13434 W 19990615

AB Methods are disclosed for assessing an agent for an ability to inhibit $\beta(1,6)$ -glucan synthesis and/or incorporation of $\beta(1,6)$ -glucan into the cell wall, comprising contacting samples of yeast cells that are sensitive to a killer toxin that targets $\beta(1,6)$ -glucan with a test agent and a LD of the killer toxin, and/or contacting samples of yeast cells that are sensitive to the killer toxin with a test agent and a sublethal dose of the killer toxin, and assessing the permeability of the cells in the samples, such as by using a membrane-impermeable dye that fluoresces on contact with DNA. Tunicamycin and nikkomycin were tested

on samples of *Staphylococcus cerevisiae* treated with lethal and sublethal doses of killer toxin. Sytox Green membrane-impermeable dye was used to assess cell permeability.

IT 1239-45-8, Ethidium bromide

RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses) (as membrane-impermeable and DNA-reactive dye; $\beta(1,6)$ -glucan synthesis and cell wall assembly assay and use in detection of antifungal agents)

RN 1239-45-8 CAPLUS

CN Phenanthridinium, 3,8-diamino-5-ethyl-6-phenyl-, bromide (8CI, 9CI) (CA INDEX NAME)

L16 ANSWER 92 OF 8218 CAPLUS COPYRIGHT 2005 ACS on STN

AN 1999:817603 CAPLUS

DN 132:289294

TI A method of raising the detecting sensitivity to plasmid DNA of gel electrophoresis

AU Shao, Chun-lin; Saito, Masahiro; Yu, Zeng-liang
Lab. of Ion Beam Bioengineering, Institute of Plasma Physics, Academia Sinica, Hefei, 230031, Peop. China

SO Jiguang Shengwu Xuebao (1999), 8(3), 238-240, C3

CODEN: JSXUFX; ISSN: 1007-7146

PB Jiguang Shengwu Xuebao Bianjibu

DT Journal

LA Chinese

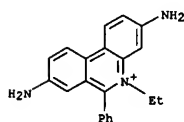
AB The influence of exciting wavelength on DNA-ethidium bromide fluorescence intensity was compared in detecting plasmid DNA of gel electrophoresis. Short exciting wavelengths enhanced the detection sensitivity to DNA fractions. Using 260 nm as the exciting wavelength, as little as 0.7 ng linear DNA was measurable, and the fluorescence intensity of DNA-ethidium bromide complex proportioned to DNA quantity of a wide range. Furthermore, measuring irradiation-induced DNA strand breaks with this modified method, yielded G(SSB) and G(DSB) values consistent with other research.

IT 1239-45-8, Ethidium bromide

RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses) (method of raising the detecting sensitivity to plasmid DNA of gel electrophoresis)

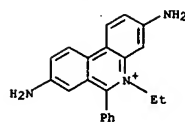
RN 1239-45-8 CAPLUS

CN Phenanthridinium, 3,8-diamino-5-ethyl-6-phenyl-, bromide (8CI, 9CI) (CA INDEX NAME)

● Br⁻

L16 ANSWER 91 OF 8218 CAPLUS COPYRIGHT 2005 ACS on STN

(Continued)

● Br⁻

RE.CNT 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L16 ANSWER 93 OF 8218 CAPLUS COPYRIGHT 2005 ACS on STN

AN 1999:811514 CAPLUS

DN 132:40574

TI Pharmaceutical preparation with trypanocidal and schizonticidal activities

IN Bourdichon, Alain-Jacques

PA Chambord Ltd., UK

SO Ger. Offen., 4 pp.

CODEN: GWXXEX

DT Patent

LA German

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI DE 19826796	A1	19991223	DE 1998-19826796	19980616

<--

PRAI DE 1998-19826796 19980616
AB A pharmaceutical composition with trypanocidal and schizonticidal activities

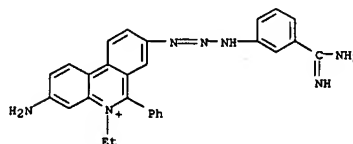
with aver low drug resistance consist of pentamidine and pyremethamine or metronidazole or tinidazole. Thus, a 100-ml formulation contained pentamidine 4.0, acetylsalicylic acid 20.0, and procaine-HCl 2.0, and pyremethamine 175.0 (or metronidazole 62.5 mg).

IT 34301-55-8, Isometamidium chloride

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (pharmaceutical preparation with trypanocidal and schizonticidal activities)

RN 34301-55-8 CAPLUS

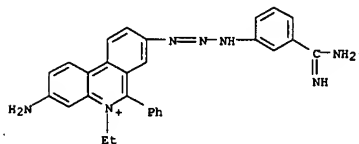
CN Phenanthridinium, 3-amino-8-[3-[(aminomethyl)phenyl]-1-triazenyl]-5-ethyl-6-phenyl-, chloride (9CI) (CA INDEX NAME)

● Cl⁻

L16 ANSWER 94 OF 8218 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 1999:811513 CAPLUS
 DN 132:40573
 TI Pharmaceuticals with trypanocidal activities
 PA Chambord Ltd., UK
 SO Ger. Offen. 4 pp.
 CODEN: GWXXBX
 DT Patent
 LA German
 FAN.CNT 1

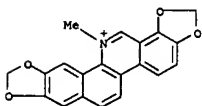
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 19826793	A1	19991223	DE 1998-19826793	19980616

<--
 PRAI DE 1998-19826793 19980616
 AB Trypanocides, pentamidine and diminazine diacetate are suitable for the treatment of malaria. Thus, a preparation contained diminazine diacetate 20.9, pentamidine 11.9, phenazone 31.3, and lidocaine 29.9% by weight. The formulation addnl. contains glycerin and N-methylpyrrolidone. The ratio of the active substances to the glycerin-N-methylpyrrolidone mixture (prepared by mixing 20.0 volume% glycerin and 80.0 volume% N-methylpyrrolidone) was 33.5 vol% to 66.5 vol%. The degradation of the drug was minimal after 6-mo storage at 50-70°.
 IT 34301-55-8, Isometamidium chloride
 RI: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (pharmaceuticals with trypanocidal activities)
 RN 34301-55-8 CAPLUS
 CN Phenanthridinium, 3-amino-8-[3-(aminomethyl)phenyl]-1-triazenyl-5-ethyl-6-phenyl-, chloride (9CI) (CA INDEX NAME)



● Cl⁻

L16 ANSWER 96 OF 8218 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 1999:804883 CAPLUS
 DN 132:63956
 TI Separation, identification and determination of sanguinarine in argemone and other adulterated edible oils by reversed-phase high-performance liquid chromatography
 AU Husain, Sajid; Narsimha, R.; Rao, R. Nageswara
 CS Analytical Chemistry and Environmental Science Division, Indian Institute of Chemical Technology, Hyderabad, 500 007, India
 SO Journal of Chromatography, A (1999), 863(1), 123-126
 CODEN: JCHRAEY; ISSN: 0021-9673
 PB Elsevier Science B.V.
 DT Journal
 LA English
 AB A simple, rapid and reliable reversed-phase HPLC method for the separation and determination of sanguinarine in argemone and other adulterated edible oils was developed. The separation was achieved on a C18 column with MeOH-MeCN-THF-H₂O as mobile phase using diode array detection at 280 nm. The min. detection limit of sanguinarine in the adulterated edible oils is 5 µg/g.
 IT 2447-54-3, Sanguinarine
 RI: ANT (Analyte); ANST (Analytical study) (separation, identification and determination of sanguinarine in argemone and other adulterated edible oils by reversed-phase high-performance liquid chromatog.)
 RN 2447-54-3 CAPLUS
 CN [1,3]Benzodioxolo[5,6-c]-1,3-dioxolo[4,5-i]phenanthridinium, 13-methyl- (9CI) (CA INDEX NAME)

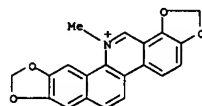


RE.CNT 12 THERE ARE 12 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L16 ANSWER 95 OF 8218 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 1999:808638 CAPLUS
 DN 132:37917
 TI Non-toxic antimicrobial lubricant
 IN Lindman, Gerald
 PA American Eagle Technologies, Inc., USA
 SO U.S., 4 pp., Cont.-in-part of Ser. No. US 1997-897133, filed on 18 Jul 1997, now
 CODEN: USXXAM
 DT Patent
 LA English
 FAN.CNT 2

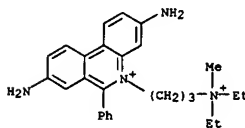
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 6004909	A	19991221	US 1999-243150	19990202
US 5869436	A	19990209	US 1997-897133	19970718
US 1997-897133	A2	19970718		
US 1996-730355	B1	19961015		

<--
 PRAI US 1997-897133
 AB A non-toxic antimicrobial boundary lubricant comprises a major portion of base oil composed either sep. or in various combinations of animal, vegetable and/or petroleum oils and a minor portion of an extreme pressure additive; an antioxidant; and an antimicrobial compound. The lubricant has a pH of 7.40 (±0.15 pH units) and preferably contains chlorhexidine gluconate as an antimicrobial compound.
 IT 2447-54-3
 RI: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); MOA (Modifier or additive use); BIOL (Biological study); USES (Uses) (nontoxic antimicrobial lubricants containing)
 RN 2447-54-3 CAPLUS
 CN [1,3]Benzodioxolo[5,6-c]-1,3-dioxolo[4,5-i]phenanthridinium, 13-methyl- (9CI) (CA INDEX NAME)



RE.CNT 27 THERE ARE 27 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L16 ANSWER 97 OF 8218 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 1999:804066 CAPLUS
 DN 132:305378
 TI Detection by the comet assay of apoptosis induced in lymphoid cell lines after growth factor deprivation
 AU Florent, M.; Godard, T.; Ballet, J. J.; Gauduchon, P.; Sola, B.
 CS UPRES-EA 2128, UFR de Medecine, Universite de Caen, Caen, Fr.
 SO Cell Biology and Toxicology (1999), 15(3), 185-192
 CODEN: CBTOE2; ISSN: 0742-2091
 PB Kluwer Academic Publishers
 DT Journal
 LA English
 AB Dysregulation of apoptosis contributes to various diseases such as neurodegenerative or aging disorders, autoimmune syndromes or cancers. Numerous exptl. paradigms have been explored to characterize mol. and cellular modulators of apoptosis. Similarly, numerous techniques have been described for detecting and/or quantifying accurately cells committed to apoptosis. Besides the conventional techniques, we describe in this report that the comet assay, which detects DNA single- and double-strand breaks in situ, at the cellular level, is relevant for the characterization of apoptotic cells. The comet assay is very sensitive and detects DNA fragmentation occurring in the apoptotic process as early as exposure of phosphatidylserine residues on the outer leaflet. Thus the comet assay can be used for the recognition of apoptosis that follows the death signal caused, for example, by genotoxic stress as well as lack of survival signal as in growth factor deprivation.
 IT 25535-16-4, Propidium iodide
 RI: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process) (detection by comet assay of apoptosis induced in lymphoid cell lines after growth factor deprivation)
 RN 25535-16-4 CAPLUS
 CN Phenanthridinium, 3,8-diamino-5-[3-(diethylmethylammonio)propyl]-6-phenyl-, diiodide (8CI, 9CI) (CA INDEX NAME)

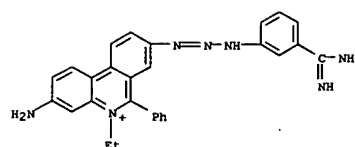


● I⁻

RE.CNT 22 THERE ARE 22 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L16 ANSWER 98 OF 8218 CAPLUS COPYRIGHT 2005 ACS ON STN
 AN 1999:800079 CAPLUS
 DN 132:245885
 TI The therapeutic use of isometamidium chloride against *Cryptobia salmositica* in rainbow trout (*Oncorhynchus mykiss*)
 AU Ardelli, B. F.; Woo, P. T. K.
 CS Department of Zoology, University of Guelph, Guelph, ON, N1G 2W1, Can.
 SO Diseases of Aquatic Organisms (1999), 37(3), 195-203
 CODEN: DAOREO; ISSN: 0177-5103
 PB Inter-Research
 DT Journal
 LA English
 AB Rainbow trout injected i.m. with isometamidium chloride (0.01 or 0.1 mg kg⁻¹) at 3 wk postinfection and given a booster 2 wk later had significantly lower parasitemias than infected controls. Packed cell volume increased after treatment and remained higher than in infected controls. The concentration of isometamidium in plasma was highest at 2 wk after injection and then declined. An i.m. dose of 1.0 mg kg⁻¹ isometamidium chloride at 1, 2, and 3 wk postinfection (preclin.) significantly reduced the parasitemia in rainbow trout 2 wk after treatment. A booster at 9 wk postinfection (chronic disease phase) reduced the parasitemia further in all fish. The packed cell volume in these fish was higher than in infected controls. Treatment at 5, 6, and 7 wk postinfection (acute disease) had no effects and parasitemias in treated fish were higher than in infected controls; also, anti-*Cryptobia salmositica* antibodies and titers of complement-fixing antibody were higher in these than in infected controls. Incubation of immune plasma or complement with isometamidium for 3 h did not affect the lytic titers of complement-fixing antibodies nor rainbow trout complement.
 IT 34301-55-8, Isometamidium chloride
 RI: BPR (Biological process); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses) (therapeutic use of isometamidium chloride against *Cryptobia salmositica* in rainbow trout)
 RN 34301-55-8 CAPLUS
 CN Phenanthridinium,
 3-amino-8-[(3-[(3-aminoiminomethyl)phenyl]-1-triazenyl)-5-ethyl-6-phenyl-, chloride (9CI) (CA INDEX NAME)

L16 ANSWER 98 OF 8218 CAPLUS COPYRIGHT 2005 ACS ON STN (Continued)



● Cl⁻

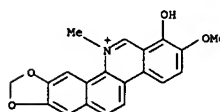
RE.CNT 30 THERE ARE 30 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L16 ANSWER 99 OF 8218 CAPLUS COPYRIGHT 2005 ACS ON STN
 AN 1999:795688 CAPLUS
 DN 132:35333
 TI Multibinding inhibitors of topoisomerase
 IN Linsell, Martin S.; Meier-Davis, Susan; Griffin, John H.
 PA Advanced Medicine, Inc., USA
 SO PCT Int. Appl., 142 pp.
 CODEN: PIXXD2
 DT Patent
 LA English
 FAN.CNT 31

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9964054	A1	19991216	WO 1999-US12908	19990608

--
 W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TH, TR, TT, UA, UG, US, VN, YU, ZA, ZW, AM, AZ, BY, BG, KE, MD, RU, TJ, TM
 RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
 US 6288234 B1 20010911 US 1999-325662 19990604
 SG 106036 A1 20040930 SG 1999-2845 19990607
 CA 2321166 AA 19991216 CA 1999-2321166 19990608
 --
 AU 9946771 A1 19991230 AU 1999-46771 19990608
 --
 EP 1085891 A1 20010328 EP 1999-930179 19990608
 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI
 SG 80631 A1 20010522 SG 1999-2719 19990608
 SG 90053 A1 20020723 SG 1999-2944 19990608
 US 656509 B1 20030520 US 1999-327899 19990608
 ZA 200004086 A 20010810 ZA 2000-4086 20000810
 ZA 200004458 A 20011130 ZA 2000-4558 20000831
 ZA 200004559 A 20020402 ZA 2000-4559 20000831
 US 2002028943 A1 20020307 US 2001-760827 20010117
 US 2004023290 A1 20040205 US 2002-161279 20020603
 US 2003176670 A1 20030918 US 2002-330381 20021227
 PRAI US 1998-88448P P 19980608
 US 1998-93072P P 19980716
 US 1999-325662 A3 19990604
 US 1999-327899 A1 19990608
 US 1999-328071 B1 19990608
 WO 1999-US12908 W 19990608
 US 2000-502938 A1 20000211
 AB Novel topoisomerase inhibitors that act as multibinding agents, LpXq [where L = a ligand capable of binding to topoisomerase; X = a linker; p = 2-10; q = 1-20; the distance between ligands 2-50 Å], are disclosed. Combinatorial arrays, methods of synthesis, and methods of assaying the dimeric and multimeric compds. are also embodied by the invention. A number of divalent prophetic examples, derived from substituted fused ring heterocyclic ligands and difunctional linkers, are given. Compds. of this invention are useful in the treatment and prevention of cancer and microbial infections (no data). The multibinding compds. provide greater

L16 ANSWER 99 OF 8218 CAPLUS COPYRIGHT 2005 ACS ON STN (Continued)
 biol. and/or therapeutic effects than the aggregate of the unlinked ligands due to their multibinding properties (no data). Ligands may include A-62176, A-74932, acridine carboxamides, actinomycin D, AD-312, AD-347, ADM, AMP-53, amrubicin, amrubicin, anthracycines, asulacrine, azonafide, azatoxin, BBR-2778, BMY-43748, BO-2367, bromodeoxyuridine, C-1310, C-1311, CC-131, CJ-12373, CI-937, CI-920 (fosfotriecin), CP-115953, camptothecin, daunorubicin, doxorubicin, DuP 937 (losoxathrone), DuP 941, elinafide, ellipticine-estradiol (conjugates), elsamitracin, ER-37328, etoposide, fleroxacin, GI-149893, GL-331, GR-122222X, ICRF-154, ICRF-193, idarubicin, iododoxorubicin, IST-622, KRQ-10018, intoplicine, lomafloxacin, losoxantrone, M-PMSEA, merbarone, meraboin, mitonafide, mitoxantrone, morindone, NCA-0465, NK-109, NK-611, NSC-655649, NSC-665517, NSC-675967, pazelliptine, pazufloxacin, PD-131112, piroxantrone, pyridobenzophenoxazine, S-16020-2, saintopin, sitafloxacin hydrate, SN-22995, sobuzoxane, SR-103, TAS-103, teloxantrone, teniposide, TLC-D-99, topotecan, tosofloxacin, TRK-710, trovafloxacin, UCE-6, VM-26, VP-16, W5R, WIN-33377, WIN-58161, WIN-645593, WQ-2743, WQ-3034, WR-63320, XR-5942, XR-5000, and 773U82.
 IT 143201-31-4DP, NK-109, dimeric and multimeric derivs. of
 RI: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (target compound; preparation of multibinding inhibitors of topoisomerase as anticancer and antimicrobial agents)
 RN 143201-31-4 CAPLUS
 CN [1,3]Benzodioxolo[5,6-c]phenanthridinium, 1-hydroxy-2-methoxy-12-methyl-, sulfate (1:1) (salt) (9CI) (CA INDEX NAME)
 CM 1
 CRN 149998-48-1
 CHF C20 H16 N O4



CM 2

CRN 14996-02-2
 CHF H O4 S

L16 ANSWER 99 OF 8218 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



RE.CNT 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L16 ANSWER 100 OF 8218 CAPLUS COPYRIGHT 2005 ACS on STN

AN 1999:792428 CAPLUS

DN 132:245757

TI Development and evaluation of an enzyme-linked immunosorbent assay (ELISA)

for the determination of the trypanocidal drug homidium in serum of treated cattle

AU Murilla, G. A.; Eisler, M. C.; Peregrine, A. S.; Ndung'u, J. M.; Holmes, P. H.

CS Radioisotope Laboratory, Kenya Trypanosomiasis Research Institute (KETRI),

Kikuyu, Kenya

SO Journal of Veterinary Pharmacology and Therapeutics (1999), 22(5), 301-307

CODEN: JVPTD9; ISSN: 0140-7783

PB Blackwell Science Ltd.

DT Journal

LA English

AB Two enzyme-linked immunosorbent assays (ELISA) for the determination of homidium

in serum of treated cattle have been developed and evaluated. One is a direct competition (Assay 1) and the other an indirect competition assay (Assay 2). Both assays are highly sensitive with a limit of detection of 0.1 ng homidium per mL serum. Homidium levels were measurable in serum

of cattle for over 2 mo following administration of a single i.m. dose at 1 mg/kg bodyweight. The level of sensitivity afforded by these assays makes

them potentially useful tools in the pharmacokinetic evaluation of homidium and for investigating drug resistance or causes of drug failure. Assay 2 was chosen as being most suitable for further studies.

IT 1239-45-8, Homidium bromide

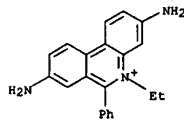
RL: ANT (Analyte); ANST (Analytical study)

(development and evaluation of an ELISA for determination of trypanocidal drug

homidium in serum of treated cattle)

RN 1239-45-8 CAPLUS

CN Phenanthridinium, 3,8-diamino-5-ethyl-6-phenyl-, bromide (8CI, 9CI) (CA INDEX NAME)



● Br⁻

RE.CNT 12 THERE ARE 12 CITED REFERENCES AVAILABLE FOR THIS RECORD

L16 ANSWER 100 OF 8218 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)
ALL CITATIONS AVAILABLE IN THE RE FORMAT

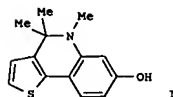
=> => d que l21

L17	76	SEA	FILE=CAPLUS	ABB=ON	PLU=ON	"DIWU ZHENJUN"/AU
L18	48	SEA	FILE=CAPLUS	ABB=ON	PLU=ON	"LIU JIXIANG"/AU
L19	15	SEA	FILE=CAPLUS	ABB=ON	PLU=ON	"GEE KYLE"/AU
L20	124	SEA	FILE=CAPLUS	ABB=ON	PLU=ON	L17 OR L18 OR L19
L21	2	SEA	FILE=CAPLUS	ABB=ON	PLU=ON	L20 AND ?QUINOLINE

=> d 1-2 bib abs

L21 ANSWER 1 OF 2 CAPLUS COPYRIGHT 2005 ACS on STM
AN 2004:609962 CAPLUS
DN 141:158508
TI Derivatives of 1,2-dihydro-7-hydroxyquinolines containing fused rings
IN Diwu, Zhenjun; Liu, Jixiang; Gao, Kyle
PA Molecular Probes, Inc., USA
SO U.S. Pat. Appl. Publ., 50 pp., Cont.-in-part of U.S. Ser. No. 922,333.
CODEN: USNXXC
DT Patent
LA English
EAW-GNT 2

PAT. NO.	KIND	DATE	APPLICATION NO.	DATE
PI US 2004147747	A1	20040729	US 2003-713670	20031113
US 200509684	A1	20020523	US 2001-922333	20010804
US 6716979	B2	20040406		
PRAI US 2000-223086P	P	20000804		
US 2001-922333	A2	20010804		
QI MARPAT 141:158508				



AB The present invention describes novel dyes, including coumarins, rhodamines, and rhodols that incorporate addnl. fused aromatic rings.

The dyes of the invention absorb at a longer wavelength than structurally similar dyes that do not possess the fused aromatic rings. Many of the dyes of the invention are useful fluorescent dyes. The invention includes chemical reactive dyes, dye-conjugates, and the use of such dyes in staining samples and detecting ligands or other analytes. Thus, heating 4-bromo-3-nitroanisole 57.7, thiophene-2-boronic acid 69.2, Pd(OAc)₂ 4.5, K₂CO₃ 14.3, and Bu₄NBr 115 mmol 1 h at 80°, reducing the resulting nitro compound with Zn dust, acetylating the resulting amine with Ac₂O, cyclizing the resulting acetate in the presence of POCl₃, heating the resulting tricyclic compound in PhCl in the presence of p-TsOMe at reflux for 2 days, reacting the resulting salt with MeMgCl in THF for 2 days, and reacting the resulting intermediated with BBr₃ in CH₂Cl₂ for 1 h gave a dye 1.

L21 ANSWER 2 OF 2 CAPLUS COPYRIGHT 2005 ACS ON STN
AN 2002:122962 CAPLUS
DN 136:163717
TI Novel hydroxyquinoline derivative fluorescent dyes and their
biological applications
IN Diwu, Xhemjun; Liu, Jiaxing; Haugland, Richard P.; Gee, Kyle R.
PA Molecular Probes, Inc., USA
SO PCT Int. Appl., 110 pp.
CODEN: PIXXD2
DT Patent
LA English

LA English							
FAN.CVT 2							
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE		
PI	WO 2002012195	A1	2002020214	WO 2001-US24479	20010804		
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZM, ZW						
RW:	GH, GM, GE, KS, LM, MW, SZ, SD, SL, SW, TZ, UG, ZW					AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG	
CA	2417816	AA	2002020214	CA 2001-2417816	20020804		
US	200709185	A5	2002020218	US 2001-79185	20020804		
EP	1311487	A	200305021	EP 2001-957438	20020804		
R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LV, FI, RO, MK, CY, AL, TR						
PRAI	US 2000-223086P	F	20000808A				
WO	2001-US24479	Y	20010804				

AS RARPAT 163:163717

AB The present invention describes novel dyes, including coumarins, rhodamines, and rhodols that incorporate a fused aromatic rings. The dyes of the invention absorb at a longer wavelength than structurally similar dyes that do not possess the fused aromatic rings. Many of the dyes of the invention are useful fluorescent dyes. The invention includes chemical reactive dyes, dye-conjugates, and the use of such dyes in staining samples and detecting ligands or other analytes.

RE.CNT 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD

ALL CITATIONS AVAILABLE IN THE RE.FORMAT

=> d his full

(FILE 'HOME' ENTERED AT 10:51:11 ON 31 OCT 2005)

FILE 'REGISTRY' ENTERED AT 10:51:19 ON 31 OCT 2005

L1 STRUCTURE UPLOADED
 D
L2 STRUCTURE UPLOADED
 D
L3 STRUCTURE UPLOADED
 D
L4 43 SEA SSS SAM L1 OR L2 OR L3
L5 1735 SEA SSS FUL L1

FILE 'CAPLUS' ENTERED AT 10:54:05 ON 31 OCT 2005

L6 333 SEA ABB=ON PLU=ON L5
L7 273 SEA ABB=ON PLU=ON L6 AND PY<2001

FILE 'REGISTRY' ENTERED AT 11:05:08 ON 31 OCT 2005

L8 13 SEA SSS SAM L2
L9 853 SEA SSS FUL L2

FILE 'CAPLUS' ENTERED AT 11:05:42 ON 31 OCT 2005

L10 198 SEA ABB=ON PLU=ON L9
L11 162 SEA ABB=ON PLU=ON L10 AND PY<2001

FILE 'REGISTRY' ENTERED AT 11:06:43 ON 31 OCT 2005

L12 50 SEA SSS SAM L3
L13 12732 SEA SSS FUL L3

FILE 'CAPLUS' ENTERED AT 11:07:30 ON 31 OCT 2005

L14 10561 SEA ABB=ON PLU=ON L13
L15 8562 SEA ABB=ON PLU=ON L14 AND PY<2001
 D QUE L7 STAT
 D L7 1-273 BIB ABS HITSTR
 D QUE L11 STA
 D L11 1-162 BIB ABS HITSTR
 D QUE L15 STAT
L16 8218 SEA ABB=ON PLU=ON L15 AND PY<2000
 D L16 1-100 BIB ABS HITSTR
 E DIWU ZHENJUN/AU
L17 76 SEA ABB=ON PLU=ON "DIWU ZHENJUN"/AU
 E LIU JIXIANG/AU
L18 48 SEA ABB=ON PLU=ON "LIU JIXIANG"/AU
 E GEE KYLE/AU
L19 15 SEA ABB=ON PLU=ON "GEE KYLE"/AU
L20 124 SEA ABB=ON PLU=ON L17 OR L18 OR L19
L21 2 SEA ABB=ON PLU=ON L20 AND ?QUINOLINE
 D QUE L21
 D 1-2 BIB ABS

FILE HOME

FILE REGISTRY

Property values tagged with IC are from the ZIC/VINITI data file
provided by InfoChem.

STRUCTURE FILE UPDATES: 30 OCT 2005 HIGHEST RN 866393-44-4
DICTIONARY FILE UPDATES: 30 OCT 2005 HIGHEST RN 866393-44-4

New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH JULY 14, 2005

Please note that search-term pricing does apply when
conducting SmartSELECT searches.

*
* The CA roles and document type information have been removed from *
* the IDE default display format and the ED field has been added, *
* effective March 20, 2005. A new display format, IDERL, is now *
* available and contains the CA role and document type information. *
*

Structure search iteration limits have been increased. See HELP SLIMITS
for details.

REGISTRY includes numerically searchable data for experimental and
predicted properties as well as tags indicating availability of
experimental property data in the original document. For information
on property searching in REGISTRY, refer to:

<http://www.cas.org/ONLINE/UG/regprops.html>

FILE CAPLUS

Copyright of the articles to which records in this database refer is
held by the publishers listed in the PUBLISHER (PB) field (available
for records published or updated in Chemical Abstracts after December
26, 1996), unless otherwise indicated in the original publications.
The CA Lexicon is the copyrighted intellectual property of the
American Chemical Society and is provided to assist you in searching
databases on STN. Any dissemination, distribution, copying, or storing
of this information, without the prior written consent of CAS, is
strictly prohibited.

FILE COVERS 1907 - 31 Oct 2005 VOL 143 ISS 19
FILE LAST UPDATED: 30 Oct 2005 (20051030/ED)

Effective October 17, 2005, revised CAS Information Use Policies apply.
They are available for your review at:

<http://www.cas.org/infopolicy.html>

=>

=> d his

(FILE 'HOME' ENTERED AT 10:51:11 ON 31 OCT 2005)

FILE 'REGISTRY' ENTERED AT 10:51:19 ON 31 OCT 2005

L1 STRUCTURE UPLOADED
L2 STRUCTURE UPLOADED
L3 STRUCTURE UPLOADED
L4 43 S L1 OR L2 OR L3
L5 1735 S L1 FULL

FILE 'CAPLUS' ENTERED AT 10:54:05 ON 31 OCT 2005

L6 333 S L5
L7 273 S L6 AND PY<2001

FILE 'REGISTRY' ENTERED AT 11:05:08 ON 31 OCT 2005

L8 13 S L2
L9 853 S L2 FULL

FILE 'CAPLUS' ENTERED AT 11:05:42 ON 31 OCT 2005

L10 198 S L9
L11 162 S L10 AND PY<2001

FILE 'REGISTRY' ENTERED AT 11:06:43 ON 31 OCT 2005

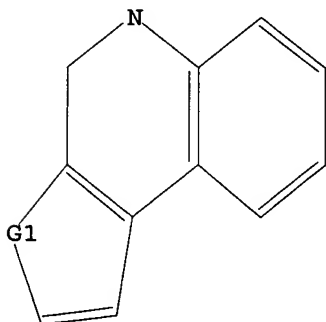
L12 50 S L3
L13 12732 S L12 FULL

FILE 'CAPLUS' ENTERED AT 11:07:30 ON 31 OCT 2005

L14 10561 S L13
L15 8562 S L14 AND PY<2001

=> d que l11 sta

L2 STR



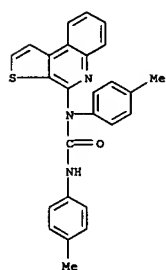
G1 O,S,N

Structure attributes must be viewed using STN Express query preparation.

L9 853 SEA FILE=REGISTRY SSS FUL L2
L10 198 SEA FILE=CAPLUS ABB=ON PLU=ON L9
L11 162 SEA FILE=CAPLUS ABB=ON PLU=ON L10 AND PY<2001

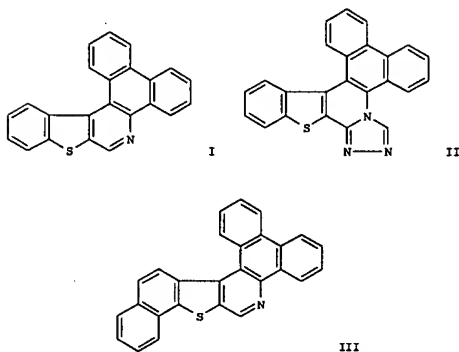
=> d l11 1-162 bib abs hitstr

L11 ANSWER 1 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 2000:742690 CAPLUS
 DN 134:71121
 TI Polycyclic Heteroaromatics from Reactions of Acylbenzotriazoles with Aryl Isocyanates
 AU Katritzky, Alan R.; Huang, Tian-Bao; Veronkov, Michael V.; Steel, Peter J.
 CS Department of Chemistry Center for Heterocyclic Compounds, University of Florida, Gainesville, FL, 32611-7200, USA
 SO Journal of Organic Chemistry (2000), 65(23), 8069-8073
 CODEN: JOCEAH; ISSN: 0022-3263
 PB American Chemical Society
 DT Journal
 LA English
 OS CASREACT 134:71121
 AB N-Acylbenzotriazoles react with aryl isocyanates to form, depending on the type of acyl group, compds. based on five different classes of polycyclic heteroarom. compds. Higher alkanoyl-, acetyl-, acetoacetyl-, aroyl-, and cinnamoylbenzotriazoles yield, resp., derivs. of quinoline, pyrimido[5,4-c]quinoline, benzo[b]-1,8-naphthyridine, phenanthridine, and indolo[2,3-b]quinoline by incorporating 3, 3, 4, 2, and 2 mols., resp. of the isocyanate per acylbenzotriazole mol.
 IT 314280-65-4P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation of polycyclic heteroarom. compds. from acylbenzotriazoles and aryl isocyanates)
 RN 314280-65-4 CAPLUS
 CN Urea, N,N'-bis(4-methylphenyl)-N-thieno[2,3-c]quinolin-4-yl- (9CI) (CA INDEX NAME)



RE.CNT 41 THERE ARE 41 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

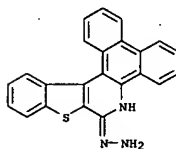
L11 ANSWER 2 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 2000:708013 CAPLUS
 DN 134:17413
 TI Synthesis of novel polycyclic heterocyclic ring systems via photocyclization. 22. Dibenzo[f,h]benzothieno[2,3-c]quinoline, dibenzo[f,h]benzothieno[2,3-c][1,2,4]triazolo[4,3-a]quinoline and dibenzo[f,h]naphtho[2',1':4,5]thieno[2,3-c]quinoline
 AU Luo, Jiann-Xuan; Cabal, Maria P.; Federspiel, Ronald F.; Castle, Raymond N.
 CS Department of Chemistry, University of South Florida Tampa, FL, 33620-5250, USA
 SO Journal of Heterocyclic Chemistry (2000), 37(4), 997-1001
 CODEN: JHCTAD; ISSN: 0022-152X
 PB HeteroCorporation
 DT Journal
 LA English
 OS CASREACT 134:17413
 GI



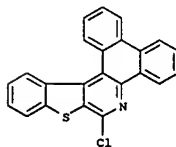
AB Photocyclization of 3-chloro-N-(9-phenanthryl)benzo[b]thiophene-2-carboxamide and 3-chloro-N-(9-phenanthryl)naphtho[1,2-b]thiophene-2-carboxamide yielded dibenzo[f,h]benzothieno[2,3-c]quinolin-10(9H)-one and dibenzo[f,h]naphtho[2',1':4,5]thieno[2,3-c]quinolin-10(9H)-one, resp. Further elaboration of the lactams provided three novel unsubstituted new ring systems (I, II, and III).
 IT 309257-38-3P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
 (preparation and conversion to triazolo-fused derivative)
 RN 309257-38-3 CAPLUS

L11 ANSWER 1 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

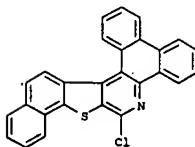
L11 ANSWER 2 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)
 CN Dibenzo[f,h][1]benzothieno[2,3-c]quinolin-10(9H)-one, hydrazone (9CI)
 (CA INDEX NAME)



IT 309257-37-2P 309257-43-0P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
 (preparation and reaction with hydrazine)
 RN 309257-37-2 CAPLUS
 CN Dibenzo[f,h][1]benzothieno[2,3-c]quinoline, 10-chloro- (9CI) (CA INDEX NAME)

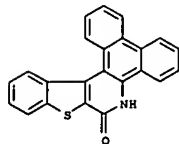


RN 309257-43-0 CAPLUS
 CN Dibenzo[f,h]naphtho[2',1':4,5]thieno[2,3-c]quinoline, 10-chloro- (9CI)
 (CA INDEX NAME)

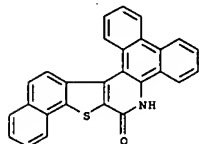


IT 309257-36-1P 309257-42-9P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
 (preparation and reaction with phosphorus oxychloride)

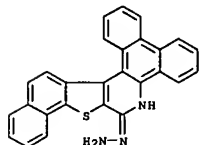
L11 ANSWER 2 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)
 RN 309257-36-1 CAPLUS
 CN Dibenzo[f,h][1]benzothieno[2,3-c]quinolin-10(9H)-one (9CI) (CA INDEX NAME)



RN 309257-42-9 CAPLUS
 CN Dibenzo[f,h]naphtho[2',1':4,5]thieno[2,3-c]quinolin-10(9H)-one (9CI) (CA INDEX NAME)

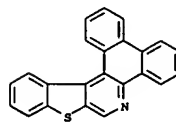


IT 309257-44-1P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
 (preparation and removal of hydrazino group from)
 RN 309257-44-1 CAPLUS
 CN Dibenzo[f,h]naphtho[2',1':4,5]thieno[2,3-c]quinolin-10(9H)-one, hydrazone (9CI) (CA INDEX NAME)

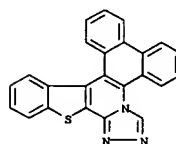


IT 309257-39-4P 309257-40-7P 309257-45-2P

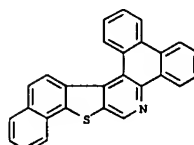
L11 ANSWER 2 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (prepn. of)
 RN 309257-39-4 CAPLUS
 CN Dibenzo[f,h][1]benzothieno[2,3-c]quinoline (9CI) (CA INDEX NAME)



RN 309257-40-7 CAPLUS
 CN Dibenzo[f,h]naphtho[2,3-c][1,2,4]triazolo[4,3-a]quinoline (9CI) (CA INDEX NAME)

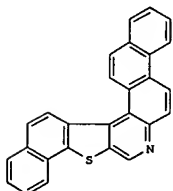


RN 309257-45-2 CAPLUS
 CN Dibenzo[f,h]naphtho[2',1':4,5]thieno[2,3-c]quinoline (9CI) (CA INDEX NAME)

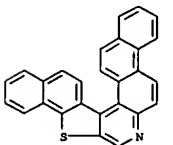


RE.CNT 32 THERE ARE 32 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 3 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN
 RN 2000:707987 CAPLUS
 DN 133:334990
 TI 1H and 13C spectral assignment of naphtho[2',1':5,6]naphtho[2',1':4,5]thieno[2,3-c]quinoline using the IDR-GHSQC-TOCSY experiment
 AU Hadden, Chad E.; Martin, Gary E.; Luo, J.-K.; Castle, Raymond N.
 CS Rapid Structure Characterization Group Pharmaceutical Development, Pharmacia Corporation, Kalamazoo, MI, 49001-0199, USA
 SO Journal of Heterocyclic Chemistry (2000), 37(4), 821-825
 CODEN: JHCTDD; ISSN: 0022-152X
 PB HeteroCorporation
 DT Journal
 LA English
 GI

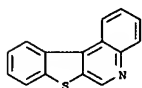


AB The assignment of the NMR spectra of the title polynuclear heteroarom. compound (I) is reported. The anal. was based on the homonuclear ROESY, heteronuclear direct GHSQC, IDR-GHSQC-TOCSY, and long-range GHSQC expts. The complete 1H and 13C shift assignments are reported.
 IT 228857-64-5, Naphtho[2,1-f]naphtho[2',1':4,5]thieno[2,3-c]quinoline
 RL: PRP (Properties)
 (1H and 13C spectral assignment of naphthonaphthothienoquinoline by IDR-GHSQC-TOCSY method)
 RN 228857-64-5 CAPLUS
 CN Naphtho[2,1-f]naphtho[2',1':4,5]thieno[2,3-c]quinoline (9CI) (CA INDEX NAME)

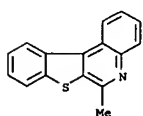


RE.CNT 13 THERE ARE 13 CITED REFERENCES AVAILABLE FOR THIS RECORD

L11 ANSWER 4 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 2000:530888 CAPLUS
 DN 133:266764
 TI New synthetic uses of 2,3-dihydro-3-oxobenzo[b]thiophene
 AU Deprets, Stephanie; Jarkas, Nachwa; Kirsch, Gilbert
 CS Groupe de Synthèse Organique et Hétérocyclique, Laboratoire de Chimie
 Organique, Faculté des Sciences, Université de Metz, METZ, 57012, Fr.
 SO Phosphorus, Sulfur and Silicon and the Related Elements (1999),
 153-154, 401-402
 CODEN: PSSLEC; ISSN: 1042-6507
 PB Gordon & Breach Science Publishers
 DT Journal
 LA English
 AB Synthesis of benzo[b]thiophenes functionalized in the position 3 and new
 polycyclic systems are discussed.
 IT 57289-92-6P, [1]Benzothieno[2,3-c]quinoline 247163-71-9P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation of benzo[b]thiophenes)
 RN 57289-92-6 CAPLUS
 CN [1]Benzothieno[2,3-c]quinoline (9CI) (CA INDEX NAME)

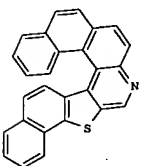


RN 247163-71-9 CAPLUS
 CN [1]Benzothieno[2,3-c]quinoline, 6-methyl- (9CI) (CA INDEX NAME)



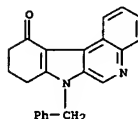
RE.CNT 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 6 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 2000:211407 CAPLUS
 DN 132:334374
 TI The synthesis of novel polycyclic heterocyclic ring systems via
 photocyclization. 21 Naphtho[2',1':4,5]thieno[2,3-c]naphtho[1,2-
 f]quinoline, naphtho[2',1':4,5]thieno[2,3-c]naphtho[1,2-f][1,2,4-
 triazolo[4,3-a]quinoline and naphtho[2',1':4,5]thieno[2,3-c]naphtho[1,2-
 f]tetrazolo[1,5-a]quinoline
 AU Luo, Jiann-Kuan; Federspiel, Ronald F.; Castle, Raymond N.
 CS Department of Chemistry, University of South Florida, Tampa, FL,
 33620-5250, USA
 SO Journal of Heterocyclic Chemistry (2000), 37(1), 171-174
 CODEN: JHTCAD; ISSN: 0022-152X
 PB HeteroCorporation
 DT Journal
 LA English
 OS CASREACT 132:334374
 GI



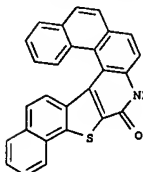
AB Photocyclization of 3-chloro-N-(3-phenanthryl)naphtho[1,2-b]thiophene-2-
 carboxamide furnished only one of the two possible isomers, i.e.,
 naphtho[2',1':4,5]thieno[2,3-c]naphtho[1,2-f]quinolin-6(5H)-one, which
 was further elaborated to yield the unsubstituted ring system I, its
 triazole, and tetrazole. The structural confirmation of I was accomplished by the
 total assignment of its 1H and 13C NMR spectra utilizing the concerted
 two-dimensional NMR spectroscopic expts.
 IT 268218-23-1P 268218-25-3P 268218-26-4P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
 (Reactant or reagent)
 (oxidative photocyclization of
 chlorophenanthrylnaphthothiophenecarboxa
 mide)
 RN 268218-23-1 CAPLUS
 CN Naphtho[1,2-f]naphtho[2',1':4,5]thieno[2,3-c]quinolin-6(5H)-one (9CI)
 (CA INDEX NAME)

L11 ANSWER 5 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 2000:246827 CAPLUS
 DN 133:17396
 TI Reactivity of heterocyclic enamines: regioselective synthesis of
 polyfused indolones
 AU Blache, Yves; Benzezech, Veronique; Chezal, Jean-Michel; Boule, Pierre;
 Viols, Henri; Chavignon, Olivier; Teulade, Jean-Claude; Chapat,
 Jean-Pierre
 CS Laboratoire de Chimie Organique Pharmaceutique, Faculté de Pharmacie,
 Montpellier, 34060, Fr.
 SO Heterocycles (2000), 53(4), 905-916
 CODEN: HETCYM; ISSN: 0385-5414
 PB Japan Institute of Heterocyclic Chemistry
 DT Journal
 LA English
 OS CASREACT 133:17396
 AB Photocyclization of heterocyclic enamines to give partial hydrogenated
 derivs. of indolo[2,3-c]quinoline, pyrido[2,3-c]carbazole, and
 pyrido[4,3-a]carbazole is described. In addition, 3-[(5'-
 quinolinyl)benzylamino]cyclohex-2-en-1-one and 3-[(8'-
 quinolinyl)benzylamino]cyclohex-2-en-1-one undergo C-N bond cleavages and
 a benzyl migration on the C(6) and C(7) positions, resp.
 IT 271779-02-3P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (regioselective synthesis of polyfused indolones from heterocyclic
 enamines)
 RN 271779-02-3 CAPLUS
 CN 11H-Indolo[2,3-c]quinolin-11-one, 7,8,9,10-tetrahydro-7-(phenylmethyl)-
 (9CI) (CA INDEX NAME)

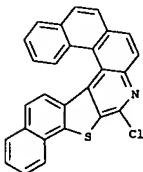


RE.CNT 25 THERE ARE 25 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

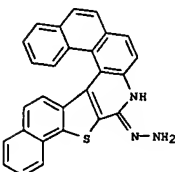
L11 ANSWER 6 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



RN 268218-25-3 CAPLUS
 CN Naphtho[1,2-f]naphtho[2',1':4,5]thieno[2,3-c]quinoline, 6-chloro- (9CI)
 (CA INDEX NAME)

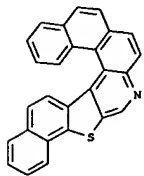


RN 268218-26-4 CAPLUS
 CN Naphtho[1,2-f]naphtho[2',1':4,5]thieno[2,3-c]quinolin-6(5H)-one,
 hydrazone (9CI) (CA INDEX NAME)

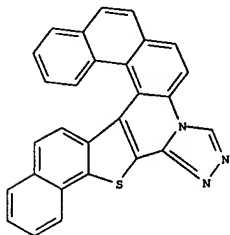


IT 268218-12-8P 268218-15-1P 268218-17-3P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (oxidative photocyclization of
 chlorophenanthrylnaphthothiophenecarboxa
 mide)
 RN 268218-12-8 CAPLUS

L11 ANSWER 6 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)
 CN Naphtho[1,2-f]naphtho[2',1':4,5]thieno[2,3-c]quinoline (9CI) (CA INDEX NAME)

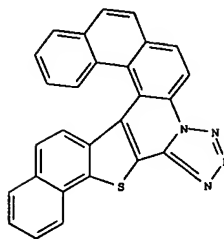


RN 268218-15-1 CAPLUS
 CN Naphtho[1,2-f]naphtho[2',1':4,5]thieno[2,3-c][1,2,4]triazolo[4,3-a]quinoline (9CI) (CA INDEX NAME)



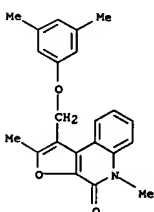
RN 268218-17-3 CAPLUS
 CN Naphtho[1,2-f]naphtho[2',1':4,5]thieno[2,3-c]tetrazolo[1,5-a]quinoline (9CI) (CA INDEX NAME)

L11 ANSWER 6 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



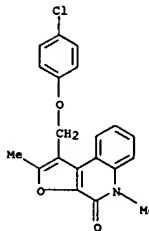
RE.CNT 28 THERE ARE 28 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 7 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN
 RN 1999:654217 CAPLUS
 DN 131:351256
 TI Synthesis of furo[2,3-c]quinolin-4(5H)-ones
 AU Majumdar, Krishna C.; Kundu, Anup K.; Biswas, Paritosh
 CS Department of Chemistry, University of Kalyani, Kalyani, 741 235, India
 SO Heterocycles (1999), 51(10), 2399-2406.
 CODEN: HETCYM; ISSN: 0385-5414
 PB Japan Institute of Heterocyclic Chemistry
 DT Journal
 LA English
 OS CASREACT 131:351256
 AB A number of 1-aryloxymethyl-3H-pyrano[2,3-c]quinolin-5(6H)-ones on heating in N,N-diethylaniline for 8 h underwent an unusual ring contraction to give 1-aryloxymethyl-2-methylfuro[2,3-c]quinolin-4(5H)-ones in 66-79% yields. For example, refluxing 6-methyl-1-phenyloxymethyl-3H-pyrano[2,3-c]quinolin-5(6H)-one in N,N-diethylaniline gave 79% 2,5-dimethyl-1-phenoxymethylfuro[2,3-c]quinolin-4(5H)-one.
 IT 196309-69-0P 196309-70-3P 196309-74-7P
 222848-07-9P 222848-23-9P 222848-29-5P
 222848-37-5P 222848-43-3P 250686-89-6P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (synthesis of furo[2,3-c]quinolin-4(5H)-ones)
 RN 196309-69-0 CAPLUS
 CN Furo[2,3-c]quinolin-4(5H)-one, 1-[(3,5-dimethylphenoxy)methyl]-2,5-dimethyl- (9CI) (CA INDEX NAME)

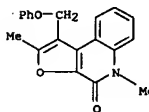


RN 196309-70-3 CAPLUS
 CN Furo[2,3-c]quinolin-4(5H)-one, 1-[(4-chlorophenoxy)methyl]-2,5-dimethyl- (9CI) (CA INDEX NAME)

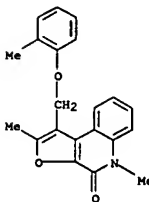
L11 ANSWER 7 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



RN 196309-74-7 CAPLUS
 CN Furo[2,3-c]quinolin-4(5H)-one, 2,5-dimethyl-1-(phenoxymethyl)- (9CI) (CA INDEX NAME)

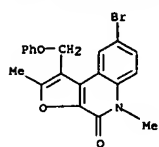


RN 222848-07-9 CAPLUS
 CN Furo[2,3-c]quinolin-4(5H)-one, 2,5-dimethyl-1-[(2-methylphenoxy)methyl]- (9CI) (CA INDEX NAME)

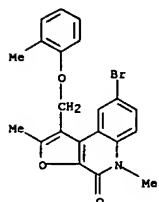


RN 222848-23-9 CAPLUS
 CN Furo[2,3-c]quinolin-4(5H)-one, 8-bromo-2,5-dimethyl-1-(phenoxymethyl)- (9CI) (CA INDEX NAME)

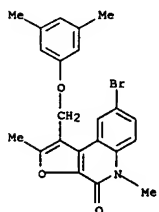
L11 ANSWER 7 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



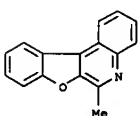
RN 222848-29-5 CAPLUS
 CN Furo[2,3-c]quinolin-4(5H)-one, 8-bromo-2,5-dimethyl-1-[(2-methylphenoxy)methyl]- (9CI) (CA INDEX NAME)



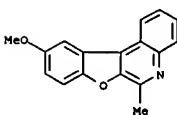
RN 222848-37-5 CAPLUS
 CN Furo[2,3-c]quinolin-4(5H)-one, 8-bromo-1-[(3,5-dimethylphenoxy)methyl]-2,5-dimethyl- (9CI) (CA INDEX NAME)



L11 ANSWER 8 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN
 RN 1999:505976 CAPLUS
 DN 131:299381
 TI Synthesis of substituted 6-methylbenzohetero[2,3-c]quinolines and 5-methylbenzohetero[2,3-c]isoquinolines by palladium-catalyzed coupling
 AU Deprets, S.; Kirsch, G.
 CS Groupe de Synthèse Organique et Hétérocyclique, Laboratoire de Chimie Organique, Faculté des Sciences, Université de Metz, Metz, 57012, Fr.
 SO ECHET98: Electronic Conference on Heterocyclic Chemistry, June 29-July 24, 1998 (1998), 350-358. Editor(s): Rzepa, Henry S.; Kappe, C. Oliver; Leach, Christopher. Publisher: Imperial College Press, London, UK.
 CODEN: 67TSA2
 DT Conference; (computer optical disk)
 LA English
 OS CASREACT 131:299381
 AB The Stille and Suzuki cross-coupling reactions applied to 3-bromo-2-formylbenzo[b]furans, -thiophenes, and -selenophenes and to 2-acetyl-3-[(trifluoromethyl)sulfonyl]benzo[b]furans led to 3-phenylbenzo[b]furans, -thiophenes, and -selenophenes and to the title tetracyclic heterocycles, e.g., 5-methylbenzo[b]furoisoquinolines.
 IT 128433-11-4P 247163-69-5P 247163-70-8P
 RL: SPN (Synthetic preparation); PREP (Preparation) (preparation of)
 RN 128433-11-4 CAPLUS
 CN Benzofuro[2,3-c]quinoline, 6-methyl- (9CI) (CA INDEX NAME)

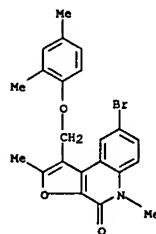


RN 247163-69-5 CAPLUS
 CN Benzofuro[2,3-c]quinoline, 10-methoxy-6-methyl- (9CI) (CA INDEX NAME)

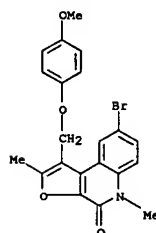


RN 247163-70-8 CAPLUS
 CN Benzofuro[2,3-c]quinoline, 6-methyl-10-(methylthio)- (9CI) (CA INDEX NAME)

L11 ANSWER 7 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)
 RN 222848-43-3 CAPLUS
 CN Furo[2,3-c]quinolin-4(5H)-one, 8-bromo-1-[(2,4-dimethylphenoxy)methyl]-2,5-dimethyl- (9CI) (CA INDEX NAME)

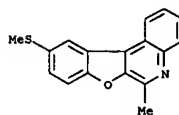


RN 250686-89-6 CAPLUS
 CN Furo[2,3-c]quinolin-4(5H)-one, 8-bromo-1-[(4-methoxyphenoxy)methyl]-2,5-dimethyl- (9CI) (CA INDEX NAME)

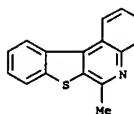


RE.CNT 39 THERE ARE 39 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 8 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

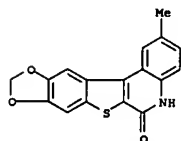


RN 247163-71-9 CAPLUS
 CN [1]Benzothieno[2,3-c]quinoline, 6-methyl- (9CI) (CA INDEX NAME)



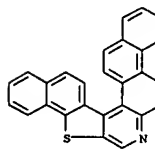
RE.CNT 19 THERE ARE 19 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 9 OF 162 CAPLUS COPYRIGHT 2005 ACS ON STN
 AN 1999:454957 CAPLUS
 DN 131:228673
 TI Synthesis, reactions, and biological activity of some new
 thieno[2,3-f]-1,3-benzodioxoles
 AU Bakhtie, Etify A.; Radwan, S. M.
 CS Chemistry Department, Faculty Science, Assiut Univ., Assiut, 71516, Egypt
 SO Pharmazie (1999), 54(7), 491-498
 CODEN: PHARAT; ISSN: 0031-7144
 PB Govi-Verlag Pharmazeutischer Verlag
 DT Journal
 LA English
 OS CASREACT 131:228673
 AB The reaction of 7-chlorothieno[2,3-f]-1,3-benzodioxole-6-carbonyl
 chloride
 (I) with aromatic or heterocyclic amines gave the corresponding 6-(aryl-
 or
 -hetaryl)carbonyl-7-chlorothieno[2,3-f]-1,3-benzodioxoles. On reaction
 with KSCN, EtOH, or NaN₃, I afforded the corresponding isothiocyanate,
 ester, and azide, resp. Hydrazinolysis of the ester gave the resp.
 hydrazide. These compds. were used as precursors in the synthesis of the
 target heterocycles, 6-substituted 7-chlorothieno[2,3-f]-1,3-
 benzodioxoles. Addnl., 2-methyl-1,3-dioxolo[5,6]l[1]benzothieno[2,3-
 c]quinolin-6(5H)-one was prepared. The antibacterial and antifungal
 activities of selected compds. are reported.
 IT 173976-79-9P
 RL: BAC (Biological activity or effector, except adverse); BSU
 (Biological
 study, unclassified); SPN (Synthetic preparation); BIOL (Biological
 study); PREP (Preparation)
 (preparation and antimicrobial activity of thienobenzodioxoles)
 RN 173976-79-9 CAPLUS
 CN [1,3]Dioxolo[5,6]l[1]benzothieno[2,3-c]quinolin-6(5H)-one, 2-methyl- (9CI)
 (CA INDEX NAME)



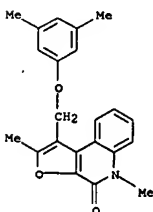
RE.CNT 21 THERE ARE 21 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 10 OF 162 CAPLUS COPYRIGHT 2005 ACS ON STN
 AN 1999:329006 CAPLUS
 DN 131:81894
 TI A comparison of the hyphenated experiments GHMQC-TOCSY and GHSQC-TOCSY
 AU Hadden, Chad E.; Martin, Gary E.; Luo, J.-K.; Castle, Raymond N.
 CS Pharmaceutical Development, Pharmacia and Upjohn, Kalamazoo, MI,
 49001-0199, USA
 SO Journal of Heterocyclic Chemistry (1999), 36(2), 533-539
 CODEN: JHTCAD; ISSN: 0022-152X
 PB HeteroCorporation
 DT Journal
 LA English
 AB Heteronuclear shift correlations generally may be established using
 either
 the multiple quantum-based GHMQC experiment or, alternately, the single
 quantum-based GHSQC experiment. A scant few reports contained in the
 literature
 have compared results obtained with both types of sequences. The F1
 resolution of the GHMQC and GHSQC expts. are compared using the
 polynuclear
 heteroarom. naphtho-[2',1':5,6]naphtho[2',1':4,5]thieno[2,3-c]quinoline.
 Even when augmented by linear prediction in F1, the single quantum-based
 GHSQC sequence gives better F1 resolution than its multiple quantum
 counterpart. To date, no studies have compared the hyphenated analogs of
 these expts., GHMQC- and GHSQC-TOCSY. Similar conclusions to GHMQC/GHSQC
 are drawn for the comparison of GHMQC- and GHSQC-TOCSY expts. with
 inverted direct responses with, and without, linear prediction. The
 latter is recommended whenever there is congestion in both the F2 and F1
 frequency domains.
 IT 228857-64-5
 RL: PREP (Physical, engineering or chemical process); PRP (Properties);
 PROC (Process)
 (in comparison of the hyphenated expts. GHMQC-TOCSY and GHSQC-TOCSY)
 RN 228857-64-5 CAPLUS
 CN Naphtho[2,1-f]naphtho[2',1':4,5]thieno[2,3-c]quinoline (9CI) (CA INDEX
 NAME)



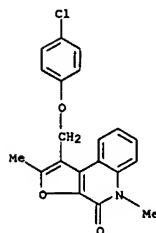
RE.CNT 10 THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 11 OF 162 CAPLUS COPYRIGHT 2005 ACS ON STN
 AN 1999:178250 CAPLUS
 DN 130:282004
 TI Unusual ring contraction of 3H-pyrano[2,3-c]quinolin-5(6H)-ones to
 furo[2,3-c]quinolin-4(5H)-ones
 AU Majumdar, Krishna C.; Kundu, Anup K.; Biswas, Paritosh
 CS Department of Chemistry, University of Kalyani, Kalyani, 741 235, India
 SO Heterocycles (1999), 51(3), 471-474
 CODEN: HETCYM; ISSN: 0385-5414
 PB Japan Institute of Heterocyclic Chemistry
 DT Journal
 LA English
 OS CASREACT 130:282004
 AB A number of 1-aryloxymethyl-3H-pyrano[2,3-c]quinolin-5(6H)-ones on
 heating in
 N,N-diethylaniline for 8 h afforded 1-aryloxymethyl-2-methylfuro[2,3-
 c]quinolin-4(5H)-ones in 66-79% yields.
 IT 196309-69-0P 196309-70-3P 196309-74-7P
 222848-07-9P 222848-23-9P 222848-29-5P
 222848-37-5P 222848-43-3P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (ring contraction of pyrano[2,3-c]quinolinones to furo[2,3-
 c]quinolinones)
 RN 196309-69-0 CAPLUS
 CN Furo[2,3-c]quinolin-4(5H)-one, 1-[(4-chlorophenoxy)methyl]-2,5-
 dimethyl- (9CI) (CA INDEX NAME)

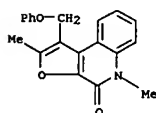


RN 196309-70-3 CAPLUS
 CN Furo[2,3-c]quinolin-4(5H)-one, 1-[(4-chlorophenoxy)methyl]-2,5-dimethyl-
 (9CI) (CA INDEX NAME)

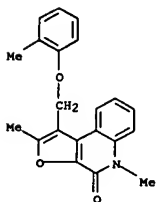
L11 ANSWER 11 OF 162 CAPLUS COPYRIGHT 2005 ACS ON STN (Continued)



RN 196309-74-7 CAPLUS
 CN Furo[2,3-c]quinolin-4(5H)-one, 2,5-dimethyl-1-[(phenoxymethyl)- (9CI) (CA
 INDEX NAME)

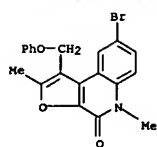


RN 222848-07-9 CAPLUS
 CN Furo[2,3-c]quinolin-4(5H)-one, 2,5-dimethyl-1-[(2-methylphenoxy)methyl]-
 (9CI) (CA INDEX NAME)

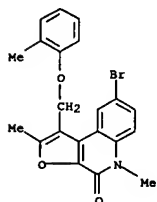


RN 222848-23-9 CAPLUS
 CN Furo[2,3-c]quinolin-4(5H)-one, 8-bromo-2,5-dimethyl-1-(phenoxymethyl)-
 (9CI) (CA INDEX NAME)

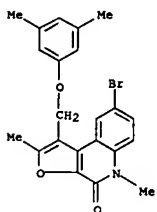
L11 ANSWER 11 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



RN 222848-29-5 CAPLUS
 CN Furo[2,3-c]quinolin-4(5H)-one, 8-bromo-2,5-dimethyl-1-[(2-methylphenoxy)methyl]- (9CI) (CA INDEX NAME)

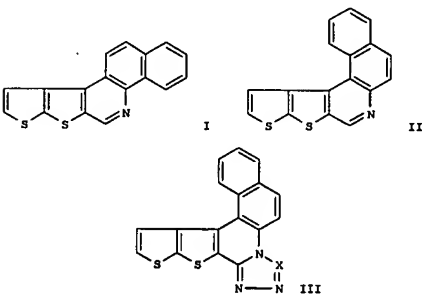


RN 222848-37-5 CAPLUS
 CN Furo[2,3-c]quinolin-4(5H)-one, 8-bromo-1-[(3,5-dimethylphenoxy)methyl]-2,5-dimethyl- (9CI) (CA INDEX NAME)



L11 ANSWER 12 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN

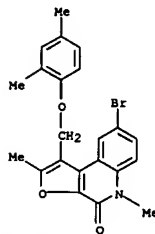
AN 1999:51064 CAPLUS
 DN 130:209614
 TI The synthesis of novel polycyclic heterocyclic ring systems via photocyclization. 20. Benzo[h]thieno[3',2':4,5]thieno[2,3-c]quinoline, benzo[f]thieno[3',2':4,5]thieno[2,3-c]quinoline, benzo[f]thieno[3',2':4,5]thieno[2,3-c]tetrazolo[1,5-a]quinoline and benzo[f]thieno[3',2':4,5]thieno[2,3-c][1,2,4]triazolo[4,3-a]quinoline
 AU Luo, Jiann-Kuan; Federapiei, Ronald F.; Castle, Raymond N.
 CS Department of Chemistry, University of South Florida, Tampa, FL, 33620-5250, USA
 SO Journal of Heterocyclic Chemistry (1998), 35(6), 1441-1444
 CODEN: JHCTAD; ISSN: 0022-152X
 PB HeteroCorporation
 DT Journal
 LA English
 GI



AB The title four, previously unknown, polycyclic heterocyclic ring systems I, II, and III (X = CH, N) were synthesized via oxidative photocyclization. Unequivocal total assignments of the proton and carbon NMR spectra of I and II were made through the concerted usage of COSY, HMQC and HMBC two-dimensional NMR spectroscopic methods.
 IT 220966-87-0P 220966-88-1P 220966-89-2P
 220966-92-7P 220966-93-8P 220966-94-9P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
 (preparation of benzo[h]thieno[3',2':4,5]thieno[2,3-c]quinoline, benzo[h]thieno[3',2':4,5]thieno[2,3-c]quinoline, benzo[f]thieno[3',2':4,5]thieno[2,3-c]quinoline, and benzo[f]thieno[3',2':4,5]thieno[2,3-c]tetrazolo[1,5-a]quinoline via photocyclizations)
 RN 220966-87-0 CAPLUS
 CN Benzo[h]thieno[3',2':4,5]thieno[2,3-c]quinolin-6(5H)-one (9CI) (CA INDEX NAME)

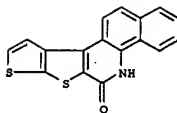
L11 ANSWER 11 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

RN 222848-43-3 CAPLUS
 CN Furo[2,3-c]quinolin-4(5H)-one, 8-bromo-1-[(2,4-dimethylphenoxy)methyl]-2,5-dimethyl- (9CI) (CA INDEX NAME)

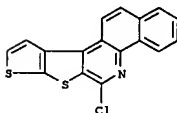


RE.CNT 37 THERE ARE 37 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

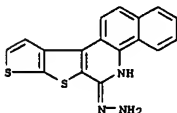
L11 ANSWER 12 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



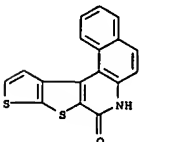
RN 220966-88-1 CAPLUS
 CN Benzo[h]thieno[3',2':4,5]thieno[2,3-c]quinoline, 6-chloro- (9CI) (CA INDEX NAME)



RN 220966-89-2 CAPLUS
 CN Benzo[h]thieno[3',2':4,5]thieno[2,3-c]quinolin-6(5H)-one, hydrazone (9CI) (CA INDEX NAME)

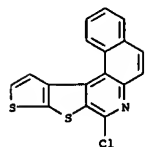


RN 220966-92-7 CAPLUS
 CN Benzo[f]thieno[3',2':4,5]thieno[2,3-c]quinolin-8(7H)-one (9CI) (CA INDEX NAME)

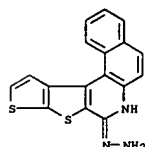


RN 220966-93-8 CAPLUS
 CN Benzo[f]thieno[3',2':4,5]thieno[2,3-c]quinoline, 8-chloro- (9CI) (CA INDEX NAME)

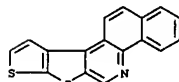
L11 ANSWER 12 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)
INDEX NAME)



RN 220966-94-9 CAPLUS
CN Benzo[f]thieno[3',2':4,5]thieno[2,3-c]quinolin-8(7H)-one, hydrazone (9CI)
(CA INDEX NAME)

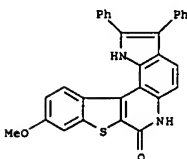


IT 220966-90-5P 220966-95-0P 220966-96-1P
220966-97-2P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of benzothienopyrroloquinolines,
benzothienopyrroloquinolines,
line, and benzothienopyrroloquinolines via photocyclizations)
RN 220966-90-5 CAPLUS
CN Benzo[h]thieno[3',2':4,5]thieno[2,3-c]quinoline (9CI) (CA INDEX NAME)

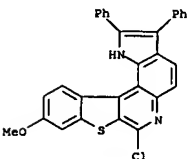


RN 220966-95-0 CAPLUS
CN Benzo[f]thieno[3',2':4,5]thieno[2,3-c]quinoline (9CI) (CA INDEX NAME)

L11 ANSWER 13 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN
AN 1998:731923 CAPLUS
DN 130:13934
TI Synthesis of pyrrolo-, thienopyrrolo-, and benzothienopyrroloquinolines
as well as of triazoloindole derivatives
AU El-Desoky, S. I.; Kandeel, E. M.; Abd El-Rahman, A. H.; Schmidt, R. R.
CS Chemistry Department, Faculty Science, Mansoura University, Mansoura,
Egypt
SO Zeitschrift fuer Naturforschung, B: Chemical Sciences (1998),
53(10), 1216-1222
CODEN: ZNBSEN; ISSN: 0932-0776
PB Verlag der Zeitschrift fuer Naturforschung
DT Journal
LA English
OS CASREACT 130:13934
AB Pyrroloquinolines, thienopyrroloquinolines, benzothienopyrroloquinolines,
and triazoloindoles were prepared starting from
6-amino-2,3-diphenylindole.
IT 216073-06-2P 216073-09-5P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
(Reactant or reagent)
(preparation of pyrroloquinolines, thienopyrroloquinolines,
benzothienopyrroloquinolines, and triazoloindoles)
RN 216073-06-2 CAPLUS
CN 7H-[1]Benzothieno[2,3-c]pyrrolo[2,3-f]quinolin-7-one, 1,6-dihydro-10-
methoxy-2,3-diphenyl- (9CI) (CA INDEX NAME)

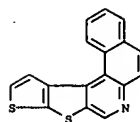


RN 216073-09-5 CAPLUS
CN 1H-[1]Benzothieno[2,3-c]pyrrolo[2,3-f]quinoline, 7-chloro-10-methoxy-2,3-
diphenyl- (9CI) (CA INDEX NAME)

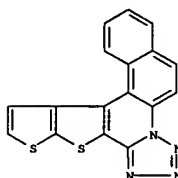


IT 216073-08-4P 216073-12-0P

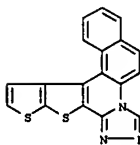
L11 ANSWER 12 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



RN 220966-96-1 CAPLUS
CN Benzo[f]tetrazolo[1,5-a]thieno[3',2':4,5]thieno[2,3-c]quinoline (9CI)
(CA INDEX NAME)

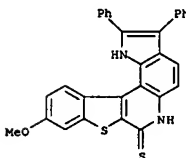


RN 220966-97-2 CAPLUS
CN Benzo[f]thieno[3',2':4,5]thieno[2,3-c][1,2,4]triazolo[4,3-a]quinoline
(9CI) (CA INDEX NAME)

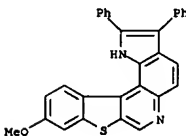


RE.CNT 25 THERE ARE 25 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 13 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of pyrroloquinolines, thienopyrroloquinolines,
benzothienopyrroloquinolines, and triazoloindoles)
RN 216073-08-4 CAPLUS
CN 7H-[1]Benzothieno[2,3-c]pyrrolo[2,3-f]quinoline-7-thione,
1,6-dihydro-10-methoxy-2,3-diphenyl- (9CI) (CA INDEX NAME)

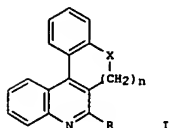


RN 216073-12-0 CAPLUS
CN 1H-[1]Benzothieno[2,3-c]pyrrolo[2,3-f]quinoline, 10-methoxy-2,3-diphenyl-
(9CI) (CA INDEX NAME)



RE.CNT 13 THERE ARE 13 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

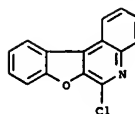
L11 ANSWER 14 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 1998:691461 CAPLUS
 DN 130:66121
 TI Characterization of quinoline derivatives. Part 3. Mass spectrometry and X-ray crystallography of biologically interesting arylquinolines
 AU Giorgi, Gianluca; Cappelli, Andrea; Anzini, Maurizio; Vomero, Salvatore
 CS Centro Interdipartimentale di Analisi e Determinazioni Strutturali, Universita degli Studi di Siena, Siena, 53100, Italy
 SO Journal of Molecular Structure (1998), 470(3), 283-293
 CODEN: JMOB4; ISSN: 0022-2860
 PB Elsevier Science B.V.
 DT Journal
 LA English
 GI



AB The structural characterization of a novel series of biol. interesting arylquinolines based on four-ring fused heterocyclic systems is carried out. Chlorinated precursors [I: X,n,R given: CH₂,O,Cl; CH₂,1,Cl;O,O,Cl; O,1,Cl;O,2,Cl] as well as final products [I: X,n,R given: CH₂,1,4-methyl-1-piperazinyl(6); O,1,4-methyl-1-piperazinyl;O,2,4-methyl-1-piperazinyl] active as potent and selective 5-HT₃ receptor antagonists, are characterized in the gas phase by low- and high-resolution mass spectrometry and tandem mass spectrometry. For the 4-methyl-1-piperazinylbenzophenanthridine derivative 6 the crystal and mol. structures were also determined. These data, compared to those obtained for its analogous benzopyrane and benzoxepine deriva., allow for an evaluation of the influence exerted by the ring fused at the face c of the quinoline on the conformational properties of the mol.
 IT 128433-18-1
 RL: PEP (Physical, engineering or chemical process); RCT (Reactant); PROC (Process); RACT (Reactant or reagent)
 (mass spectrometry and X-ray crystallog. of biol. interesting arylquinolines)
 RN 128433-18-1 CAPLUS
 CN Benzofuro[2,3-c]quinoline, 6-chloro- (9CI) (CA INDEX NAME)

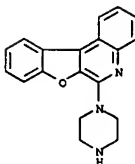
L11 ANSWER 15 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 1998:298853 CAPLUS
 DN 128:290174
 TI Arylpiperazines with Serotonin-3 Antagonist Activity: A Comparative Molecular Field Analysis
 AU Morreale, Antonio; Galvez-Ruano, Enrique; Iriepe-Canalda, Isabel; Boyd, Donald B.
 CS Department of Chemistry, Indiana University-Purdue University at Indianapolis, Indianapolis, IN, 46202-3274, USA
 SO Journal of Medicinal Chemistry (1998), 41(12), 2029-2039
 CODEN: JMCHAR; ISSN: 0022-2623
 PB American Chemical Society
 DT Journal
 LA English
 AB Comparative mol. field anal. (CoMFA) is applied to antagonists of the 5-HT₃ receptor. Anal. is done sep. on three published sets of arylpiperazines and on a combination of the three sets. D-Tubocurarine, a conformationally restricted 5-HT₃ ligand, is used as a template to assist in selecting the conformation of the antagonists for CoMFA alignment.
 Two forms of the arylpiperazines (neutral and protonated) and three different kinds of calculated charges (Gasteiger-Hueckel, AML, and AML with solvation effect included) are compared. Protonated structures give better statistical results than the neutral species. The way in which charges are calculated does not greatly affect the results. In terms of mol. fields, the behavior in each sep. set of compds. cannot be extrapolated to the combined set of 47 compds. The average value of r_{2cv} from PLS cross-validation on the combined set is 0.70 and varies between 0.56 and 0.80 depending on the orientation of the mols. in the coordinate system. The CoMFA model is tested on four compds. not in the training set: quipazine, N-methylquipazine, 4-phenyl-N-methylquipazine, and KB-6933. Mean agreement of exptl. and predicted pK_i values of the antagonists is 0.7 log unit. Novel structural modifications are interpreted by the CoMFA model.
 IT 165966-36-9 165966-37-0 165966-38-1 165966-39-2
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study) (comparative mol. field anal. of arylpiperazines with serotonin-3 antagonist activity)
 RN 165966-36-9 CAPLUS
 CN Benzofuro[2,3-c]quinoline, 6-(1-piperazinyl)- (9CI) (CA INDEX NAME)

L11 ANSWER 14 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

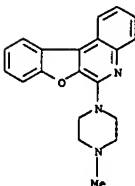


RE.CNT 34 THERE ARE 34 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

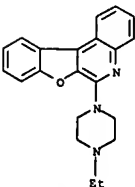
L11 ANSWER 15 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



RN 165966-37-0 CAPLUS
 CN Benzofuro[2,3-c]quinoline, 6-(4-methyl-1-piperazinyl)- (9CI) (CA INDEX NAME)

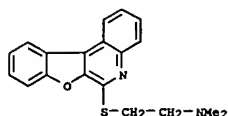


RN 165966-38-1 CAPLUS
 CN Benzofuro[2,3-c]quinoline, 6-(4-ethyl-1-piperazinyl)- (9CI) (CA INDEX NAME)



RN 165966-39-2 CAPLUS
 CN Ethanamine, 2-(benzofuro[2,3-c]quinolin-6-ylthio)-N,N-dimethyl- (9CI) (CA INDEX NAME)

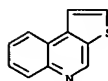
L11 ANSWER 15 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



RE.CNT 74 THERE ARE 74 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

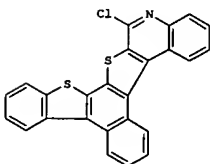
L11 ANSWER 16 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN

AN 1998:256744 CAPLUS
DN 128:321570
TI Thienoquinolines
AU Dabaeva, V. V.; Noravryan, A. S.; Enokyan, B. D.; Madakyan, V. N.
CS Inst. Tonk. Org. Khim. im. Mndzhoyana, NAN, Yerevan, Armenia
SO Khimicheskii Zhurnal Armenii (1997), 50(3-4), 83-97
CODEN: KZARF3
PB Izdatel'stvo Gitutyun NAN Respubliki Armenii
DT Journal; General Review
LA Russian
AB A review with 68 refs. on the preparation of thieno[2,3-b]quinolines and their [3,2-c], [3,2-b], [2,3-c], and [3,4-b] analogs and reactions of thieno[2,3-b]quinolines.
IT 233-04-SDP, Thieno[2,3-c]quinoline, deriva.
RL: SPN (Synthetic preparation); PREP (Preparation)
RN 233-04-5 CAPLUS
CN Thieno[2,3-c]quinoline (8CI, 9CI) (CA INDEX NAME)



L11 ANSWER 17 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN

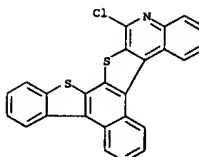
AN 1998:68056 CAPLUS
DN 128:140631
TI The synthesis of novel polycyclic heterocyclic ring systems. Synthesis and NMR spectroscopy of 15-chloro[1]benzothieno[2'',3'':3',4']naphtho[1',2':4,5]thieno[2,3-c]quinoline
AU Sasaki, Kenji; Tokuda, Osamu; Hirota, Takashi; Luo, Jiann-Kuan; Federspiel, Ronald P.; Castle, Raymond M.
CS Faculty of Pharmaceutical Sciences, Okayama University, Okayama, 700, Japan
SO Journal of Heterocyclic Chemistry (1997), 34(6), 1829-1832
CODEN: JHTCAD; ISSN: 0022-152X
PB HeteroCorporation
DT Journal
LA English
GI



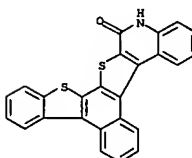
I

AB The polycyclic heterocyclic compound with a novel ring system, 15-chloro[1]benzothieno[2'',3'':3',4']naphtho[1',2':4,5]thieno[2,3-c]quinoline (I) was synthesized via photocyclization of 3-chloro-N-phenyl[1]-benzothieno[2'',3'':3',4']naphtho[2,1-b]thiophene-2-carboxamide followed by chlorination with phosphorus oxychloride. The assignment of its ¹H and ¹³C NMR spectra was accomplished by utilizing two-dimensional NMR methods.
IT 202148-25-2P
RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation) (preparation and NMR of chlorobenzothienonaphthothienoquinoline)
RN 202148-25-2 CAPLUS
CN [1]Benzothieno[2'',3'':3',4']naphtho[1',2':4,5]thieno[2,3-c]quinoline, 15-chloro- (9CI) (CA INDEX NAME)

L11 ANSWER 17 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



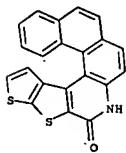
IT 202148-24-1P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent) (preparation and NMR of chlorobenzothienonaphthothienoquinoline)
RN 202148-24-1 CAPLUS
CN [1]Benzothieno[2'',3'':3',4']naphtho[1',2':4,5]thieno[2,3-c]quinolin-15(16H)-one (9CI) (CA INDEX NAME)



RE.CNT 21 THERE ARE 21 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

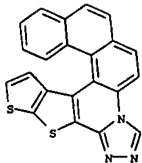
L11 ANSWER 18 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN
AN 1997:751978 CAPLUS
DN 128:34702

TI The synthesis of novel polycyclic heterocyclic ring systems via photocyclization. 19. Thieno[3',2':4,5]thieno[2,3-c]naphtho[1,2-f]quinoline, thieno[3',2':4,5]thieno[2,3-c]naphtho[1,2-f][1,2,4]triazolo[4,3-a]quinoline and thieno[3',2':4,5]thieno[2,3-c]naphtho[1,2-f]tetrazolo[1,5-a]quinoline
AU Luo, Jiann-Kuan; Federspiel, Ronald F.; Castle, Raymond N.
CS Department of Chemistry, University of South Florida, Tampa, FL, 33620-5250, USA
SO Journal of Heterocyclic Chemistry (1997), 34(5), 1597-1601
CODEN: JHYCAD; ISSN: 0022-152X
PB HeteroCorporation
DT Journal
LA English
OS CASREACT 128:34702
AB Photocyclization of 3-chloro-N-(3-phenanthryl)thieno[2,3-b]thiophene-2-carboxamide yielded only one of the two possible structural isomers, thieno[3',2':4,5]thieno[2,3-c]naphtho[1,2-f]quinolin-6(5H)-one, which was subjected to further reactions.
IT 199681-00-0P 199681-01-1P 199681-02-2P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of thienothienonaphthoquinolinone via photocyclization)
RN 199681-00-0 CAPLUS
CN Naphtho[1,2-f]thieno[3',2':4,5]thieno[2,3-c]quinolin-6(5H)-one (9CI) (CA INDEX NAME)

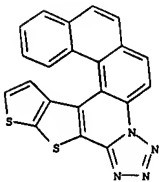


RN 199681-01-1 CAPLUS
CN Naphtho[1,2-f]thieno[3',2':4,5]thieno[2,3-c]quinoline, 6-chloro- (9CI) (CA INDEX NAME)

L11 ANSWER 18 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

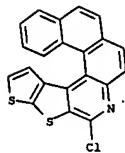


RN 199681-05-5 CAPLUS
CN Naphtho[1,2-f]tetrazolo[1,5-a]thieno[3',2':4,5]thieno[2,3-c]quinoline (9CI) (CA INDEX NAME)

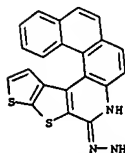


RE.CMT 29 THERE ARE 29 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

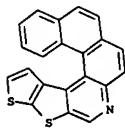
L11 ANSWER 18 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



RN 199681-02-2 CAPLUS
CN Naphtho[1,2-f]thieno[3',2':4,5]thieno[2,3-c]quinolin-6(5H)-one, hydrazone (9CI) (CA INDEX NAME)



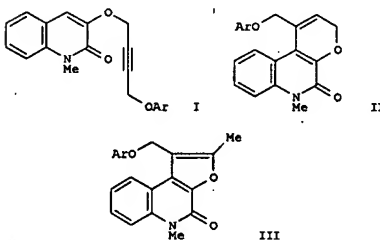
IT 199681-03-3P 199681-04-4P 199681-05-5P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of thienothienonaphthoquinolinone via photocyclization)
RN 199681-03-3 CAPLUS
CN Naphtho[1,2-f]thieno[3',2':4,5]thieno[2,3-c]quinoline (9CI) (CA INDEX NAME)



RN 199681-04-4 CAPLUS
CN Naphtho[1,2-f]thieno[3',2':4,5]thieno[2,3-c][1,2,4]triazolo[4,3-a]quinoline (9CI) (CA INDEX NAME)

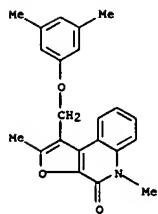
L11 ANSWER 19 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN

AN 1997:589538 CAPLUS
DN 127:278156
TI Studies in sigmatropic rearrangement of 3-(4-aryloxybut-2-ynyloxy)-1-methylquinolin-2-ones: synthesis of 3H-pyrano[2,3-c]quinolin-5(6H)-ones and furo[2,3-c]quinolin-4(5H)-ones
AU Majumdar, Krishna C.; Kundu, Anup K.
CS Department of Chemistry, University of Kalyani, Kalyani, 741 325, India
SO Heterocycles (1997), 45(8), 1467-1475
CODEN: HTCYAM; ISSN: 0385-5414
PB Japan Institute of Heterocyclic Chemistry
DT Journal
LA English
OS CASREACT 127:278156
GI

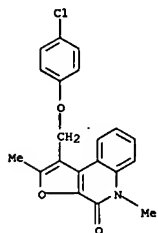


AB 3-(4-Aryloxybut-2-ynyloxy)-1-methylquinolin-2-ones I (Ar = Ph, 2-MeC6H4, 3,5-Me2C6H4, etc.), in refluxing chlorobenzene, gave 1-aryloxymethyl-6-methyl-3H-pyrano[2,3-c]quinolin-5(6H)-ones II and/or, 1-aryloxymethyl-2,5-dimethylfuro[2,3-c]quinolin-4(5H)-ones III. The base or the radical initiator (azoisobutyronitrile) does not seem to have any effect on the formation of the products. Substrates I provided only products III in the presence of toluene-4-sulfonic acid. All the substrates studied so far underwent sigmatropic rearrangements at the 4-quinolin-3-ynyloxypropynyl function to give products II and/or III.
IT 196309-69-0P 196309-70-3P 196309-71-4P
196309-72-5P 196309-73-6P 196309-74-7P
196309-75-8P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of pyrano- and furoquinolinones by sigmatropic rearrangement of (aryloxybutynyloxy)quinolinones)
RN 196309-69-0 CAPLUS
CN Furo[2,3-c]quinolin-4(5H)-one, 1-[(3,5-dimethylphenoxy)methyl]-2,5-dimethyl- (9CI) (CA INDEX NAME)

L11 ANSWER 19 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

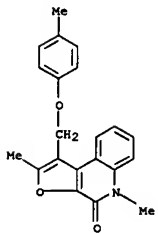


RN 196309-70-3 CAPLUS
CN Furo[2,3-c]quinolin-4(5H)-one, 1-[(4-chlorophenoxy)methyl]-2,5-dimethyl- (9CI) (CA INDEX NAME)

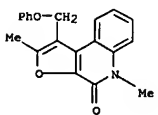


RN 196309-71-4 CAPLUS
CN Furo[2,3-c]quinolin-4(5H)-one, 1-[(2,4-dichlorophenoxy)methyl]-2,5-dimethyl- (9CI) (CA INDEX NAME)

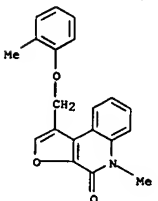
L11 ANSWER 19 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



RN 196309-74-7 CAPLUS
CN Furo[2,3-c]quinolin-4(5H)-one, 2,5-dimethyl-1-(phenoxymethyl)- (9CI) (CA INDEX NAME)

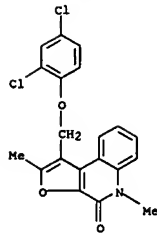


RN 196309-75-8 CAPLUS
CN Furo[2,3-c]quinolin-4(5H)-one, 5-methyl-1-[(2-methylphenoxy)methyl]- (9CI) (CA INDEX NAME)

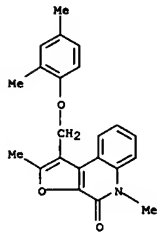


RE.CNT 43 THERE ARE 43 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 19 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



RN 196309-72-5 CAPLUS
CN Furo[2,3-c]quinolin-4(5H)-one, 1-[(2,4-dimethylphenoxy)methyl]-2,5-dimethyl- (9CI) (CA INDEX NAME)



RN 196309-73-6 CAPLUS
CN Furo[2,3-c]quinolin-4(5H)-one, 2,5-dimethyl-1-[(4-methylphenoxy)methyl]- (9CI) (CA INDEX NAME)

L11 ANSWER 20 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN

AN 1997:69832 CAPLUS
DN 126:89394
TI Preparation of fused polycyclic heterocycle derivatives such as benzo[c]pyrimido[5,6,1-jk]carbazole-4,6(5H)-dione derivatives as antitumor agents
IN Sugumi, Hiroyuki; Nijima, Jun; Kotake, Yoshihiko; Okada, Toshimi; Kamata, Jun-ichi; Yoshimatsu, Kentaro; Nagasu, Takeshi; Nakamura, Katsuji; Uenaka, Toshimitsu; Yamaguchi, Atsumi; Yoshino, Hiroshi; Koyanagi, Nozomu; Kito, Kyosuke; et al.
PA Eisai Co., Ltd., Japan; et al.
SO PCT Int. Appl., 98 pp.
CODEN: PIXXD2
DT Patent
LA Japanese
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9638446	A1	19961205	WO 1996-JP1487	19960531
W: AU, CA, CN, HU, KR, MX, NO, NZ, RU, US				
RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
JP 09208466	A2	19970812	JP 1996-28325	19960215
CA 2220509	AA	19961205	CA 1996-2220509	19960531
CA 2220509	C	19961205		
AU 9658454	A1	19961218	AU 1996-58454	19960531
AU 703111	B2	19990318		
EP 831094	A1	19980325	EP 1996-920027	19960531
EP 831094	B1	20041208		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, PT, IE,				
CN 1185781	A	19980624	CN 1996-194291	19960531
CN 1067686	B	20010627		
RU 2167877	C2	20010527	RU 1997-121851	19960531
AT 284401	E	20041215	AT 1996-920027	19960531
ES 2229272	T3	20050416	ES 1996-920027	19960531
US 9552335	A	19990914	US 1997-952778	19971126
NO 9705493	A	19980129	NO 1997-5493	19971128
NO 310149	B1	20010528		
JP 1995-133992	A	19950531		
JP 1995-309195	A	19951128		
WO 1996-JP1487	W	19960531		

OS MARPAT 126:89394
GI For diagram(s), see printed CA Issue.
AB Novel fused polycyclic heterocycle derivs. represented by general formula [I]; the ring A = an optionally substituted monocyclic aromatic ring or a fused bicyclic ring wherein at least one of the rings is an aromatic ring;
the ring B = pyrrole, 4H-1,4-dioxane, 4H-1,4-thiazine or 4(1H)-pyridone;
the ring C = an optionally substituted monocyclic or fused bicyclic aromatic

L11 ANSWER 20 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)
 ring; Y = Z-R (wherein Z = lower alkylene; R = amidino, guanidino, or amino optionally substituted by hydroxy or lower alkyl optionally lower-alkylaminated); excluding a combination wherein the rings A and C are each an optionally substituted monocyclic arom. ring] or pharmacol. acceptable salts thereof which have an excellent antitumor effect, are prepd. Thus, 4.9 g 1,2,3,4-tetrahydro-7H-benzo[c]carbazole-8-carboxamide deriv. (III) (prepn. given) was added to a suspension of 0.9 g in DMF at room temp., stirred at room temp. for 2 h, treated with 2.5 g Et chloroformate under stirring and ice-cooling, an the resulting mixt. was allowed to react at room temp. for 15 min to give, after salt formation with 1 N HCl in MeOH, 4.3 g 12,13-dihydro-4H-benzo[c]pyrimido[5,6,1,-jk]carbazole-4,6,10(5H,11H)-trione (II.HCl; RR1 = O). This compd. was hydrogenated in the presence of Pd-C in a mixt. of, H₂O, 1 N aq. HCl, and MeOH at H pressure .apprx. 4.5 kg/cm² and treated with aq. NH₃ to give an alc. II (R = H, R1 = OH) (III), which underwent optical resolu. using a Chiralcel OD column (Daisel Chem. Ind., Japan) to give an optically

active isomer (+)-II (R = H, R1 = OH). The latter compd. and III showed IC₅₀ of 0.0017 and 0.030 μ M, resp., for inhibiting the proliferation of P388 cells. III in vivo inhibited the growth of mouse M5060 sarcoma in mice

by 100% at 12.5 mg/kg/day i.p. on day 1, 8, and 15.

IT 185555-56-OP 185556-11-OP

RL: BAC (Biological activity or effector, except adverse); BSU

(Biological

study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use);

BIOL (Biological study); PREP (Preparation); USES (Uses)

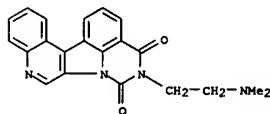
(preparation of fused polycyclic heterocycle derivs. such as

benzopyrimidocarbazoledione derivs. as antitumor agents)

RN 185555-56-0 CAPLUS

CN 4H-Quino[4',3':4,5]pyrrolo[3,2,1-i]quinazoline-4,6(5H)-dione,

5-[2-(dimethylamino)ethyl]-, dihydrochloride (9CI) (CA INDEX NAME)



●2 HCl

RN 185556-11-0 CAPLUS

CN 5H-4c,6,8-Triazaphth[2,1-a]aceanthrylene-5,7(6H)-dione, 6-[2-(dimethylamino)ethyl]- (9CI) (CA INDEX NAME)

L11 ANSWER 21 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN

AN 1996:573283 CAPLUS

DN 125:275695

TI Synthesis and photosynthesis of substituted benzo[b]thieno[3,2-

c]quinolones

AU Dogan, Jasna; Karminski-Zamola, Grace; Boykin, David W.

CS Fac. Chemical Eng. Technology, Univ. Zagreb, Zagreb, 10000, Croatia

SO Heterocyclic Communications (1996), 2(3), 213-217

CODEN: HCOMEX; ISSN: 0793-0283

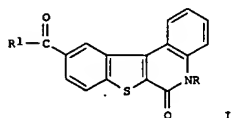
PB Freund

DT Journal

LA English

OS CASREACT 125:275695

GI



AB Two benzo[b]thieno[3,2-c]quinolones with 3-dimethylaminopropyl substituent

in the quinolone or amide part of the mol.: 9-(3-(3-dimethylaminopropyl)benzo[b]thienyl[3,2-c]quinolin-6(5H)-one I (R = H, R1 =

NH(CH₂)₃NMe₂) and 5-N-(3-dimethylaminopropyl)-9-carbomethoxybenzo[b]thienyl[3,2-c]quinolin-6-one I (R = (CH₂)₃NMe₂, R1 = OMe) are prepared by multistep synthesis involving, as key step a

photochem. dehydrohalogenation reaction.

IT 182231-67-OP

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT

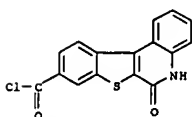
(Reactant or reagent)

(preparation and amination with dimethylaminopropylamine)

RN 182231-67-0 CAPLUS

CN [1]Benzo[b]thieno[2,3-c]quinoline-9-carboxylic acid, 5,6-dihydro-6-oxo-

(9CI) (CA INDEX NAME)



IT 182231-64-7P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT

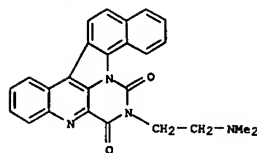
(Reactant or reagent)

(preparation and chlorination of)

RN 182231-64-7 CAPLUS

L11 ANSWER 20 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN

(Continued)

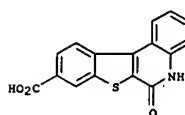


L11 ANSWER 21 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN

(Continued)

CN [1]Benzo[b]thieno[2,3-c]quinoline-9-carboxylic acid, 5,6-dihydro-6-oxo-

(9CI) (CA INDEX NAME)



IT 182231-62-5P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT

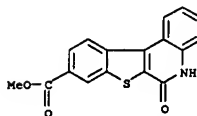
(Reactant or reagent)

(preparation and saponification of)

RN 182231-62-5 CAPLUS

CN [1]Benzo[b]thieno[2,3-c]quinoline-9-carboxylic acid, 5,6-dihydro-6-oxo-

methyl ester (9CI) (CA INDEX NAME)



IT 182231-72-7P 182231-82-9P

RL: SPN (Synthetic preparation); PREP (Preparation)

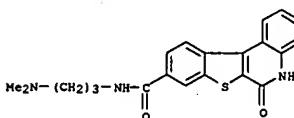
(preparation of)

RN 182231-72-7 CAPLUS

CN [1]Benzo[b]thieno[2,3-c]quinoline-9-carboxamide,

N-[3-(dimethylamino)propyl]-

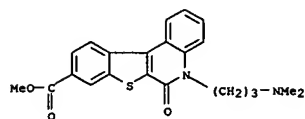
5,6-dihydro-6-oxo- (9CI) (CA INDEX NAME)



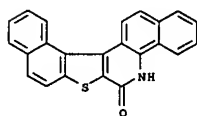
RN 182231-82-9 CAPLUS

CN [1]Benzo[b]thieno[2,3-c]quinoline-9-carboxylic acid, 5-[3-(dimethylamino)propyl]-5,6-dihydro-6-oxo-, methyl ester (9CI) (CA INDEX NAME)

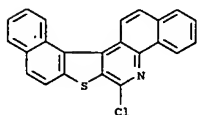
L11 ANSWER 21 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



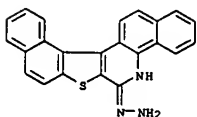
L11 ANSWER 22 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)
 RN 181486-69-1 CAPLUS
 CN Benzo[h]naphtho[1',2':4,5]thieno[2,3-c]quinolin-6(5H)-one (9CI) (CA INDEX NAME)



RN 181486-70-4 CAPLUS
 CN Benzo[h]naphtho[1',2':4,5]thieno[2,3-c]quinoline, 6-chloro- (9CI) (CA INDEX NAME)

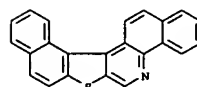


RN 181486-71-5 CAPLUS
 CN Benzo[h]naphtho[1',2':4,5]thieno[2,3-c]quinolin-6(5H)-one, hydrazone (9CI) (CA INDEX NAME)

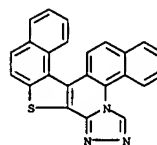


L11 ANSWER 22 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN

AN 1996:499190 CAPLUS
 DN 125:221637
 TI The synthesis of novel polycyclic heterocyclic ring system via photocyclization. 18. Benzo[h]naphtho[1',2':4,5]thieno[2,3-c]quinoline and benzo[h]naphtho[1',2':4,5]thieno[2,3-c][1,2,4]triazolo[4,3-a]quinoline
 AU Luo, Jiann-Kuan; Federspiel, Ronald F.; Castle, Raymond N.
 CS Dep. Chem., Univ. South Florida, Tampa, FL, 33620-5250, USA
 SO Journal of Heterocyclic Chemistry (1996), 33(3), 923-926
 CODEN: JHTCAD; ISSN: 0022-152X
 PB HeteroCorporation
 DT Journal
 LA English
 AB The synthesis of two previously unknown polycyclic ring systems, benzo[h]naphtho[1',2':4,5]thieno[2,3-c]quinoline and benzo[h]naphtho[1',2':4,5]thieno[2,3-c][1,2,4]triazolo[4,3-a]quinoline, was achieved via oxidative photocyclization of 1-chloro-N-(1-naphthyl)naphtho[2,1-b]thiophene-2-carboxamide. The total assignment of their 1H and 13C NMR spectra was determined by the concerted use of two-dimensional NMR methods.
 IT 181486-66-8P 181486-67-9P
 RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
 (preparation of polycyclic heterocycles via photocyclization)
 RN 181486-66-8 CAPLUS
 CN Benzo[h]naphtho[1',2':4,5]thieno[2,3-c]quinoline (9CI) (CA INDEX NAME)



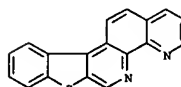
RN 181486-67-9 CAPLUS
 CN Benzo[h]naphtho[1',2':4,5]thieno[2,3-c][1,2,4]triazolo[4,3-a]quinoline (9CI) (CA INDEX NAME)



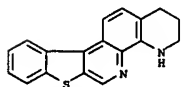
IT 181486-69-1P 181486-70-4P 181486-71-5P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
 (preparation of polycyclic heterocycles via photocyclization)

L11 ANSWER 23 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN

AN 1996:499163 CAPLUS
 DN 125:221650
 TI Synthesis and total 1H-NMR assignment of [1]benzothieno[2,3-c][1,10]phenanthroline
 AU Halverson, Aileen Pfeleider; Castle, Lyle W.
 CS Dep. Chem., Idaho State Univ., Pocatello, ID, 83209-8023, USA
 SO Journal of Heterocyclic Chemistry (1996), 33(3), 727-730
 CODEN: JHTCAD; ISSN: 0022-152X
 PB HeteroCorporation
 DT Journal
 LA English
 AB [1]Benzothieno[2,3-c][1,10]phenanthroline (5) was prepared by acylation of 8-aminoquinoline with 3-chlorobenzo[b]thiophene-2-carbonyl chloride, followed by photocyclization, aromatization with POC13, and dechlorination with LiAlH4. The total assignment of the 1H-NMR spectra of 5 was accomplished with the aid of two-dimensional NMR methods.
 IT 181473-16-5P 181473-17-6P
 RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
 (synthesis and total 1H-NMR assignment of benzothienophenanthroline)
 RN 181473-16-5 CAPLUS
 CN [1]Benzothieno[2,3-c][1,10]phenanthroline (9CI) (CA INDEX NAME)

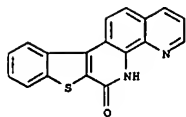


RN 181473-17-6 CAPLUS
 CN [1]Benzothieno[2,3-c][1,10]phenanthroline, 1,2,3,4-tetrahydro- (9CI) (CA INDEX NAME)

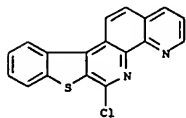


IT 181473-14-3P 181473-15-4P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
 (synthesis and total 1H-NMR assignment of benzothienophenanthroline)
 RN 181473-14-3 CAPLUS
 CN [1]Benzothieno[2,3-c][1,10]phenanthroline-6(5H)-one (9CI) (CA INDEX NAME)

L11 ANSWER 23 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

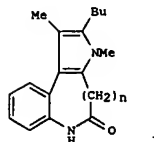


RN 181473-15-4 CAPLUS
 CN [1]Benzo[thieno[2,3-c][1,10]phenanthroline, 6-chloro- (9CI) (CA INDEX NAME)



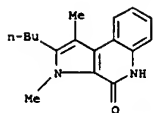
L11 ANSWER 24 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN

AN 1996:421015 CAPLUS
 DN 125:168417
 TI Compounds interacting with tubulin. Part II. Synthesis of tricyclic lactams with a phenylpyrrole framework, structural analogs of rhazinilam
 AU Alazard, Jean-Pierre; Millet-Paillusson, Corinne; Guenard, Daniel; Thal, Claude
 CS Inst. de chimie des substances naturelles, CNRS, Gif-sur-Yvette, 91198, Fr.
 SO Bulletin de la Societe Chimique de France (1996), 133(3), 251-266
 CODEN: BSCFAS; ISSN: 0037-8968
 PB Elsevier
 DT Journal
 LA French
 GI

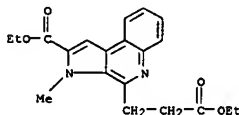


AB Tricyclic lactam analogs of rhazinilam with different alkyl substituents in the α and β positions on the pyrrole ring, and different sizes of the lactam ring (6-, 7-, 8- and 9-membered), e.g. I ($n = 0-3$) were prepared. These compds. were prepared from arylpyrroles. The in vitro biol. activities of all these analogs (evaluated by an antitubulin test) were found to be inferior to that of rhazinilam, but were nevertheless of the same type. The results are discussed.
 IT 180338-08-3P
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation) (synthesis and antitubulin activity of tricyclic lactams with a phenylpyrrole framework, structural analogs of rhazinilam)
 RN 180338-08-3 CAPLUS
 CN 4H-Pyrrolo[2,3-c]quinolin-4-one, 2-butyl-3,5-dihydro-1,3-dimethyl- (9CI) (CA INDEX NAME)

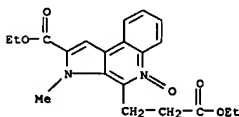
L11 ANSWER 24 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



IT 180338-40-3P 180338-41-4P
 RL: SPN (Synthetic preparation); PREP (Preparation) (synthesis and antitubulin activity of tricyclic lactams with a phenylpyrrole framework, structural analogs of rhazinilam)
 RN 180338-40-3 CAPLUS
 CN 3H-Pyrrolo[2,3-c]quinoline-4-propanoic acid, 2-(ethoxycarbonyl)-3-methyl-, ethyl ester (9CI) (CA INDEX NAME)

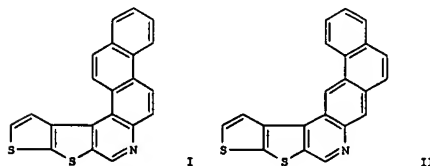


RN 180338-41-4 CAPLUS
 CN 3H-Pyrrolo[2,3-c]quinoline-4-propanoic acid, 2-(ethoxycarbonyl)-3-methyl-, ethyl ester, 5-oxide (9CI) (CA INDEX NAME)



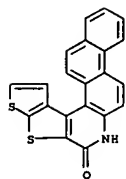
L11 ANSWER 25 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN

AN 1996:187578 CAPLUS
 DN 124:317026
 TI The synthesis of novel polycyclic heterocyclic ring systems via photocyclization. 17. Thieno[3',2':4,5]thieno[2,3-c]naphtho[2,1-f]quinoline and thieno[3',2':4,5]thieno[2,3-c]naphtho[1,2-g]quinoline
 AU Luo, Jiann-Kuan; Federspiel, Ronald F.; Castle, Raymond N.; Castle, Lyle W.
 CS Department of Chemistry, University of South Florida, Tampa, FL, 33620-5250, USA
 SO Journal of Heterocyclic Chemistry (1996), 33(1), 185-9
 CODEN: JHTCAD; ISSN: 0022-152X
 PB HeteroCorporation
 DT Journal
 LA English
 GI

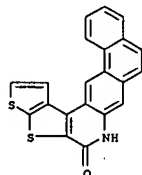


AB The synthesis of two previously unknown novel polycyclic heterocyclic ring systems via photocyclization is described. The structural assignment of the title isomeric ring systems, I and II, was achieved by the total assignment of their 1H and 13C NMR spectra by the concerted usage of two-dimensional NMR methods.
 IT 176218-39-6P 176218-40-9P 176218-41-0P 176218-42-1P 176218-43-2P 176218-44-3P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent) (preparation of thienothienonaphthoquinoline isomers)
 RN 176218-39-6 CAPLUS
 CN Naphtho[2,1-f]thieno[3',2':4,5]thieno[2,3-c]quinolin-8(7H)-one (9CI) (CA INDEX NAME)

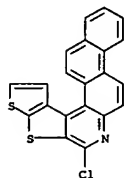
L11 ANSWER 25 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



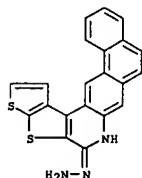
RN 176218-40-9 CAPLUS
CN Naphtho[1,2-g]thieno[3',2':4,5]thieno[2,3-c]quinolin-9(8H)-one (9CI) (CA INDEX NAME)



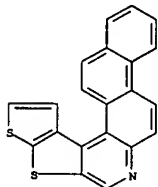
RN 176218-41-0 CAPLUS
CN Naphtho[2,1-f]thieno[3',2':4,5]thieno[2,3-c]quinoline, 8-chloro- (9CI) (CA INDEX NAME)



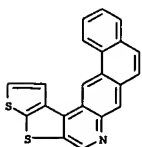
L11 ANSWER 25 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



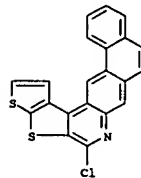
IT 176218-45-4P 176218-46-5P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of thienothienonaphthoquinoline isomers)
RN 176218-45-4 CAPLUS
CN Naphtho[2,1-f]thieno[3',2':4,5]thieno[2,3-c]quinoline (9CI) (CA INDEX NAME)



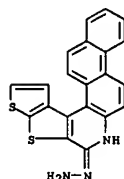
RN 176218-46-5 CAPLUS
CN Naphtho[1,2-g]thieno[3',2':4,5]thieno[2,3-c]quinoline (9CI) (CA INDEX NAME)



L11 ANSWER 25 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)
RN 176218-42-1 CAPLUS
CN Naphtho[1,2-g]thieno[3',2':4,5]thieno[2,3-c]quinoline, 9-chloro- (9CI) (CA INDEX NAME)



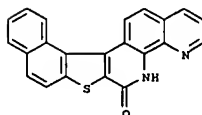
RN 176218-43-2 CAPLUS
CN Naphtho[2,1-f]thieno[3',2':4,5]thieno[2,3-c]quinolin-8(7H)-one, hydrazone (9CI) (CA INDEX NAME)



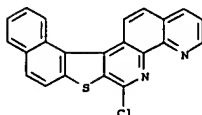
RN 176218-44-3 CAPLUS
CN Naphtho[1,2-g]thieno[3',2':4,5]thieno[2,3-c]quinolin-9(8H)-one, hydrazone (9CI) (CA INDEX NAME)

L11 ANSWER 26 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN

RN 1996:187577 CAPLUS
DN 124:317025
TI Synthesis and total 1H-NMR assignment of naphtho[1',2':4,5]thieno[2,3-c][1,10]phenanthroline and naphtho[2',1':4,5]thieno[2,3-c][1,10]phenanthroline
AU Halverson, Aileen Pfeleider; Castle, Lyle W.; Castle, Raymond N.
CS Department of Chemistry, Idaho State University, Pocatello, ID, 83209-8023, USA
SO Journal of Heterocyclic Chemistry (1996), 33(1), 179-83
CODEN: JHTCAD; ISSN: 0022-152X
PB HeteroCorporation
DT Journal
LA English
AB Naphtho[1',2':4,5]thieno[2,3-c][1,10]phenanthroline and naphtho[2',1':4,5]thieno[2,3-c][1,10]phenanthroline, two novel polycyclic heterocyclic ring systems, have been synthesized in four steps from known starting materials. The total 1H NMR spectral assignments were made using a COSY experiment to identify the spin systems.
IT 176174-60-0P 176174-61-1P 176174-64-6P
176174-65-5P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and NMR of naphthothienophenanthroline isomers)
RN 176174-60-0 CAPLUS
CN Naphtho[1',2':4,5]thieno[2,3-c][1,10]phenanthrolin-6(5H)-one (9CI) (CA INDEX NAME)

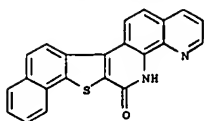


RN 176174-61-1 CAPLUS
CN Naphtho[1',2':4,5]thieno[2,3-c][1,10]phenanthroline, 6-chloro- (9CI) (CA INDEX NAME)

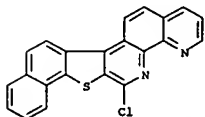


RN 176174-64-4 CAPLUS
CN Naphtho[2',1':4,5]thieno[2,3-c][1,10]phenanthrolin-6(5H)-one (9CI) (CA INDEX NAME)

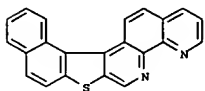
L11 ANSWER 26 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



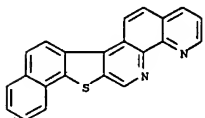
RN 176174-65-5 CAPLUS
CN Naphtho[2',1':4,5]thieno[2,3-c][1,10]phenanthroline, 6-chloro- (9CI) (CA INDEX NAME)



IT 176174-62-2P 176174-66-6P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation and NMR of naphthothienophenanthroline isomers)
RN 176174-62-2 CAPLUS
CN Naphtho[1',2':4,5]thieno[2,3-c][1,10]phenanthroline (9CI) (CA INDEX NAME)

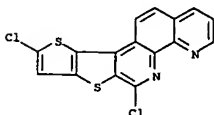


RN 176174-66-6 CAPLUS
CN Naphtho[2',1':4,5]thieno[2,3-c][1,10]phenanthroline (9CI) (CA INDEX NAME)

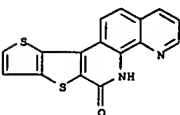


L11 ANSWER 27 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN
AN 1996:187566 CAPLUS
DN 124:317024
TI Synthesis of two novel ring systems via photocyclization:
thieno[2',3':4,5]thieno[2,3-c][1,10]phenanthroline and
thieno[3',2':4,5]thieno[2,3-c][1,10]phenanthroline
AU Halverson, Aileen Pfeleider; Castle, Lyle W.; Castle, Raymond N.
CS Department Chemistry, Idaho State University, Pocatello, ID, 83209-8023, USA
SO Journal of Heterocyclic Chemistry (1996), 33(1), 119-22
CODEN: JHCTAD; ISSN: 0022-152X
PB HeteroCorporation
DT Journal
LA English
AB The synthesis of thieno[2',3':4,5]thieno[2,3-c][1,10]phenanthroline and thieno[3',2':4,5]thieno[2,3-c][1,10]phenanthroline are described. Each compound was obtained in four steps from known starting materials. The basic skeleton of the mol. and of the phenanthroline ring were formed via photocyclization. The total assignment of 1H-NMR spectra was accomplished with the aid of two-dimensional NMR methods.

IT 176383-33-8
RL: RCT (Reactant); RACT (Reactant or reagent)
(preparation of thienothienophenanthrolines)
RN 176383-33-8 CAPLUS
CN Thieno[2',3':4,5]thieno[2,3-c][1,10]phenanthroline, 6,9-dichloro- (9CI) (CA INDEX NAME)



IT 176383-26-9P 176383-27-0P 176383-30-5P
176383-31-6P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of thienothienophenanthrolines)
RN 176383-26-9 CAPLUS
CN Thieno[2',3':4,5]thieno[2,3-c][1,10]phenanthroline-6(5H)-one (9CI) (CA INDEX NAME)

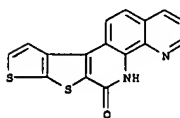


RN 176383-27-0 CAPLUS
CN Thieno[2',3':4,5]thieno[2,3-c][1,10]phenanthroline, 6-chloro- (9CI) (CA INDEX NAME)

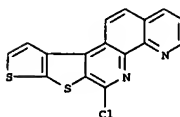
L11 ANSWER 26 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



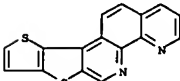
RN 176383-30-5 CAPLUS
CN Thieno[3',2':4,5]thieno[2,3-c][1,10]phenanthroline-6(5H)-one (9CI) (CA INDEX NAME)



RN 176383-31-6 CAPLUS
CN Thieno[3',2':4,5]thieno[2,3-c][1,10]phenanthroline, 6-chloro- (9CI) (CA INDEX NAME)

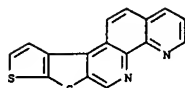


IT 176383-28-1P 176383-32-7P 176383-34-9P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of thienothienophenanthrolines)
RN 176383-28-1 CAPLUS
CN Thieno[2',3':4,5]thieno[2,3-c][1,10]phenanthroline (9CI) (CA INDEX NAME)

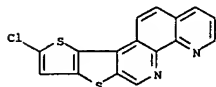


RN 176383-32-7 CAPLUS
CN Thieno[3',2':4,5]thieno[2,3-c][1,10]phenanthroline (9CI) (CA INDEX NAME)

L11 ANSWER 27 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

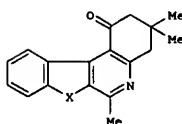


RN 176383-34-9 CAPLUS
 CN Thieno[2',3':4,5]thieno[2,3-c][1,10]phenanthroline, 9-chloro- (9CI) (CA INDEX NAME)



L11 ANSWER 28 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN

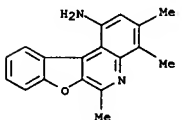
AN 1996:81086 CAPLUS
 DN 124:232281
 TI Condensed pyridine bases. Reaction of 1-oxo-3,3,6-trimethyl-1,2,3,4-tetrahydrobenzo[b]furo-, -benzo[b]thieno- and -indolo[2,3-c]quinolines with electrophilic reagents
 AU Tolkunov, S. V.; Kal'nitskii, M. N.; Khizhan, A. I.; Suikov, S. Yu.; Zubritskii, M. Yu.
 CS Inst. Fiz.-Org. Khim. Ugilekhim. im. Litvinenko, Donetsk, 340114, Ukraine
 SO Khimiya Geterotsiklicheskikh Soedinenii (1995), (8), 1124-30
 CODEN: KGSSAQ; ISSN: 0132-6244
 PB Latviiskii Institut Organicheskogo Sintez
 DT Journal
 LA Russian
 GI



AB Title compds. I (X = O, S, NH) were subjected to nitration, bromination, and the Schmidt reaction. The oximes of I were subjected to the Beckmann rearrangement.

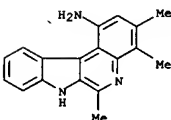
IT 174654-45-6P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent) (preparation and acetylation of)

RN 174654-45-6 CAPLUS
 CN Benzofuro[2,3-c]quinolin-1-amine, 3,4,6-trimethyl- (9CI) (CA INDEX NAME)

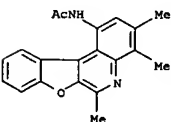


IT 174654-44-5P 174654-46-7P
 RL: SPN (Synthetic preparation); PREP (Preparation) (preparation of)
 RN 174654-44-5 CAPLUS

L11 ANSWER 28 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)
 CN 7H-Indolo[2,3-c]quinolin-1-amine, 3,4,6-trimethyl- (9CI) (CA INDEX NAME)

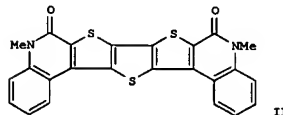
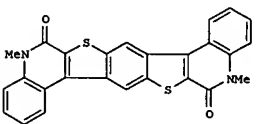


RN 174654-46-7 CAPLUS
 CN Acetamide, N-(3,4,6-trimethylbenzofuro[2,3-c]quinolin-1-yl)- (9CI) (CA INDEX NAME)



L11 ANSWER 29 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN

AN 1996:36665 CAPLUS
 DN 124:202069
 TI Photosynthesis of heteropolycyclic diquinolones twofold photodehydrohalogenation reaction of benzo[1,2-b:4,5-b']dithiophene- and the dithieno[3,2-b:2',3'-d]thiophenedicarboxanilides
 AU Malesevic, Miro; Karminski-Zamola, Grace; Bajic, Miroslav; Boykin, David W.
 CS Dep. Organic Chemistry, Univ. Zagreb, Zagreb, 41000, Croatia
 SO Heterocycles (1995), 41(12), 2691-9
 CODEN: HETCYM; ISSN: 0385-5414
 PB Japan Institute of Heterocyclic Chemistry
 DT Journal
 LA English
 OS CASREACT 124:202069
 GI

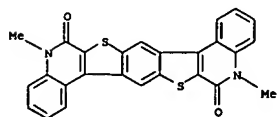


AB Heteropolycyclic diquinolones benzo[1,2-b:4,5-b']dithieno[2',3'-c:2'',3''-c']-5,13-N,N'-dimethyldiquinolone-6,14-dione (I) and dithieno[3,2-b:2',3'-d]thienyl[2'',3''-c:2'',3''-c']-5,10-N,N-dimethyldiquinolone-6,9-dione (II) are prepared by the twofold photochem. dehydrohalogenation reaction

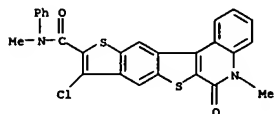
of the corresponding benzodithiophene- and dithienothiophenedicarboxanilides: 3,7-dichloro-N,N'-dimethylbenzo[1,2-b:4,5-b']dithiophene-2,6-dicarboxanilide and 3,5-dichloro-N,N'-dimethyldithieno[3,2-b:2',3'-d]thiophene-2,6-dicarboxanilide. Anilidoquinolone products of onefold photochem. dehydrohalogenation reaction: 9-chloro-10-N-methylanilidobenzo[1,2-b:4,5-b']dithieno[2,3-c']-5-N-methylquinolin-6-one and 10-chloro-9-N-methylanilidodithieno[3,2-b:2',3'-d]thienyl[2'',3''-c']-5-N-methylquinolin-6-one were also isolated to prove the mechanism of the reaction.

IT 174279-65-3P 174279-66-4P 174279-67-5P 174279-68-6P
 RL: SPN (Synthetic preparation); PREP (Preparation)

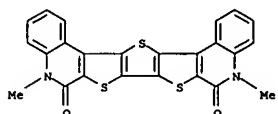
L11 ANSWER 29 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)
 (prepn. of heteropolycyclic diquinolones from benzodithiophene- and
 dithienothiophenedicarboxanilides, via photochem. dehydrohalogenation)
 RN 174279-63-3 CAPLUS
 CN Benzo[1'',2'':4,5;4'',5'':4',5']dithieno[2,3-c:2',3'-c']diquinoline-
 6,14(5H,13H)-dione, 5,13-dimethyl- (9CI) (CA INDEX NAME)



RN 174279-66-4 CAPLUS
 CN Thieno[2',3':5,6][1]benzothieno[2,3-c]quinoline-10-carboxamide,
 9-chloro-5,6-dihydro-N,5-dimethyl-6-oxo-N-phenyl- (9CI) (CA INDEX NAME)

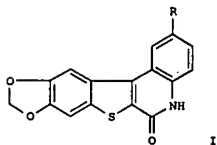


RN 174279-67-5 CAPLUS
 CN Thieno[2'',3'':4,5;5'':4'',5']dithieno[2,3-c:2',3'-c']diquinoline-
 6,9(5H,10H)-dione, 5,10-dimethyl- (9CI) (CA INDEX NAME)

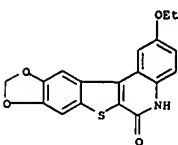


RN 174279-68-6 CAPLUS
 CN Thieno[2'',3'':4',5']thieno[2',3':4,5]thieno[2,3-c]quinoline-9-
 carboxamide, 10-chloro-5,6-dihydro-N,5-dimethyl-6-oxo-N-phenyl- (9CI)
 (CA INDEX NAME)

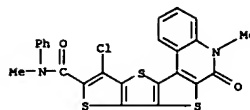
L11 ANSWER 30 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN
 RN 1995:1005882 CAPLUS
 DN 124:175885
 TI [1,3]Dioxolo[5,6][1]benzothieno[2,3-c]quinolin-6(5H)-ones
 AU Gakhar, H. K.; Kaur, R.; Gupta, S. B.
 CS Department Chemistry, Panjab University, Chandigarh, 160014, India
 SO Monatshefte fuer Chemie (1995), 126(11), 1253-6
 CODEN: MOCMB7; ISSN: 0026-9247
 PB Springer
 DT Journal
 LA English
 OS CASREACT 124:175885
 GI



AB The reaction of 3,4-methylenedioxycinnamic acid with thionyl chloride
 resulted in the formation of 7-chlorothieno[2,3-f]-1,3-benzodioxole-6-
 carbonyl chloride and 3,4-methylenedioxycinnamoyl chloride. Reaction of
 the carbonyl chloride with p-substituted anilines led to the formation of
 7-chloro-N-(p-substituted phenyl)thieno[2,3-f]-1,3-benzodioxole-6-
 carboxamides which on photocyclization gave 2-substituted
 [1,3]dioxolo[5,6][1]benzothieno[2,3-c]quinolin-6(5H)-ones I (R = OEt,
 Me) in fairly good yields and high purity. The structures have been
 confirmed by IR, 1H NMR, and anal. methods.
 IT 173976-77-7 173976-78-8 173976-79-9
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (prepn of [1,3]dioxolo[5,6][1]benzothieno[2,3-c]quinolin-6(5H)-ones
 via photocyclization of thieno[2,3-f]-1,3-benzodioxole-6-carboxamides)
 RN 173976-77-7 CAPLUS
 CN [1,3]Dioxolo[5,6][1]benzothieno[2,3-c]quinolin-6(5H)-one, 2-ethoxy- (9CI)
 (CA INDEX NAME)

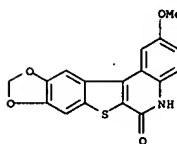


L11 ANSWER 29 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

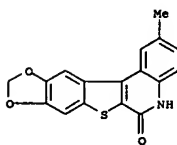


L11 ANSWER 30 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

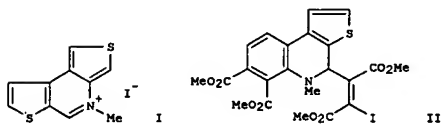
RN 173976-78-8 CAPLUS
 CN [1,3]Dioxolo[5,6][1]benzothieno[2,3-c]quinolin-6(5H)-one, 2-methoxy-
 (9CI)
 (CA INDEX NAME)



RN 173976-79-9 CAPLUS
 CN [1,3]Dioxolo[5,6][1]benzothieno[2,3-c]quinolin-6(5H)-one, 2-methyl- (9CI)
 (CA INDEX NAME)

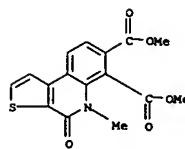


L11 ANSWER 31 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 1995:965579 CAPLUS
 DN 124:175878
 TI An unexpected [2+2]-cycloaddition reaction of
 4-methyldithieno[3,4-b:3',2'-d]pyridinium iodide with dimethyl acetylenedicarboxylate
 AU Temciuc, Ecaterina; Hoernfeldt, Anna-Britta; Gronowitz, Salo;
 Staalhandske, Claes
 CS Chem. Cent., Univ. Lund, Lund, S-221 00, Swed.
 SO Tetrahedron (1995), 51(48), 13185-96
 CODEN: TETRA; ISSN: 0040-4020
 PB Elsevier
 DT Journal
 LA English
 GI



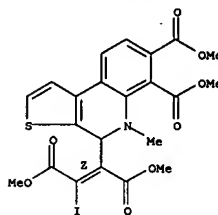
AB An unexpected [2+2]-cycloaddn. occurred in the reaction of
 4-methyldithieno[3,4-b:3',2'-d]pyridinium iodide (I) with two
 equivalent of
 DMAD, giving 4-(trans-1,2-dicarbomethoxy-2-iodovinyl)-5-methyl-6,7-
 dicarbomethoxy-4,5-dihydrothieno[2,3-c]quinoline (II) in 54% yield. II
 is
 formed via 4-methyl-5-(trans-1,2-dicarbomethoxy-2-iodo)-4,5-
 dihydrothieno[3,4-b:3',2'-d]pyridine, followed by [2+2]-cycloaddn. The
 primary adduct rearranges via a thiepin to an episulfide which eliminates
 sulfur to give II.
 IT 173544-67-7P 173544-68-8P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (cycloaddn. of acetylenedicarboxylate to dihydrothienopyridinium
 iodide)
 RN 173544-67-7 CAPLUS
 CN Thieno[2,3-c]quinoline-6,7-dicarboxylic acid,
 4,5-dihydro-5-methyl-4-oxo-,
 dimethyl ester (9CI) (CA INDEX NAME)

L11 ANSWER 31 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

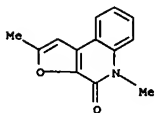


RN 173544-68-8 CAPLUS
 CN Thieno[2,3-c]quinoline-6,7-dicarboxylic acid, 4,5-dihydro-4-[2-iodo-3-
 methoxy-1-(methoxycarbonyl)-3-oxo-1-propenyl]-5-methyl-, dimethyl ester,
 (Z)- (9CI) (CA INDEX NAME)

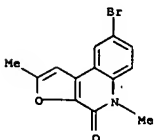
Double bond geometry as shown.



L11 ANSWER 32 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 1995:068460 CAPLUS
 DN 124:86837
 TI Studies in [3,3] sigmatropic rearrangements: facile regioselective
 synthesis of furo[2,3-c]quinolin-4(5H)-ones and 3H-pyrano[2,3-c]quinolin-
 5(6H)-ones
 AU Majumdar, Krishna C.; Kundu, Anup K.; Chatterjee, Pranab
 CS Department of Chemistry, University of Kalyani, Kalyani, 741 235, India
 SO Journal of Chemical Research, Synopses (1995), (10), 386-7
 CODEN: JRFSDC; ISSN: 0308-2342
 PB Royal Society of Chemistry
 DT Journal
 LA English
 OS CASREACT 124:86837
 AB Facile regioselective syntheses of hitherto unreported
 6-methyl-3H-pyrano[2,3-c]quinolin-5(6H)-ones and 1,2-dimethylfuro[2,3-
 c]quinolin-4(5H)-ones were described. E.g., refluxing
 1-methyl-3-(prop-2-yn-1-yloxy)quinolin-2(1H)-one in chlorobenzene gave 92%
 6-methyl-3H-pyrano[2,3-c]quinolin-5(6H)-one.
 IT 172604-90-9P 172604-91-0P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
 (Reactant or reagent)
 (regioselective synthesis of furoquinolinones and pyranoquinolinones)
 RN 172604-90-9 CAPLUS
 CN Furo[2,3-c]quinolin-4(5H)-one, 2,5-dimethyl- (9CI) (CA INDEX NAME)

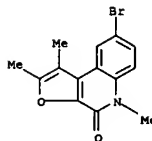


RN 172604-91-0 CAPLUS
 CN Furo[2,3-c]quinolin-4(5H)-one, 8-bromo-2,5-dimethyl- (9CI) (CA INDEX
 NAME)

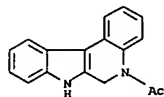


IT 172604-97-6P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (regioselective synthesis of furoquinolinones and pyranoquinolinones)
 RN 172604-97-6 CAPLUS
 CN Furo[2,3-c]quinolin-4(5H)-one, 8-bromo-1,2,5-trimethyl- (9CI) (CA INDEX
 NAME)

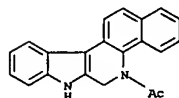
L11 ANSWER 32 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



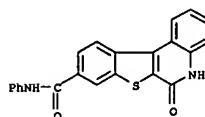
L11 ANSWER 33 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 1995:812213 CAPLUS
 DN 124:29542
 TI Palladium acetate mediated synthesis of 3,4-benzo- and naphtho- β -carbolines
 AU Jeevanandam, A.; Srinivasan, P. C.
 CS Dep. Org. Chemistry, Univ. Madras, Madras, 600 025, India
 SO Synthetic Communications (1995), 25(21), 3427-34
 CODEN: SYNCAV; ISSN: 0039-7911
 PB Dekker
 DT Journal
 LA English
 OS CASREACT 124:29542
 AB An efficient synthesis of 2-(N-arylaminoethyl)indole derivs. 5 in good yields in four steps from 2-bromomethyl-3-phenylthio-1-benzene-sulfonyl indole is reported. Palladium acetate mediated cyclisation of 5 gives benzo- and naphtho- β -carbolines.
 IT 171618-62-5P 171618-63-6P
 RL: SPN (Synthetic preparation); PREP (Preparation) (preparation of)
 RN 171618-62-5 CAPLUS
 CN 5H-Indolo[2,3-c]quinoline, 5-acetyl-6,7-dihydro- (9CI) (CA INDEX NAME)



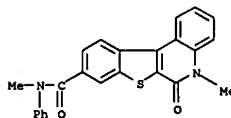
RN 171618-63-6 CAPLUS
 CN 5H-Benz[h]indolo[2,3-c]quinoline, 5-acetyl-6,7-dihydro- (9CI) (CA INDEX NAME)



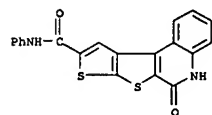
L11 ANSWER 34 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 1995:761233 CAPLUS
 DN 123:339810
 TI Photosynthesis of heteropolycyclic quinolones
 AU Dogan, Jasna; Karminski-Zamola, Grace M.; Boykin, David W.
 CS Faculty of Chemical Engineering and Technology, University of Zagreb, Zagreb, 41000, Croatia
 SO Heterocycles (1995), 41(8), 1659-66
 CODEN: HETCYM; ISSN: 0385-5414
 PB Japan Institute of Heterocyclic Chemistry
 DT Journal
 LA English
 OS CASREACT 123:339810
 AB Four new anilidoquinolones; 9-anilidobenzo[b]thieno[2,3-c]quinolin-6(5H)-one, 9-N'-methylanilidobenzo[b]thieno[2,3-c]-5-N-methylquinolin-6-one, 9-anilidothieno[4,5-b']thienyl[2,3-c]quinolin-6(5H)-one, and 9-N'-methylanilidothieno[4,5-b']thienyl[2,3-c]-5-N-methylquinolin-6-one were prepared by photochem. dehydrohalogenation of dianilides.
 Photochem.
 did dehydrogenation of the anilides to produce multicondensed diquinolones not occur.
 IT 163979-05-3P 163979-06-4P 163979-10-0P 163979-11-1P
 RL: SPN (Synthetic preparation); PREP (Preparation) (preparation of heteropolycyclic quinolones by photochem. dehydrohalogenation of dianilides)
 RN 163979-05-3 CAPLUS
 CN [1]Benzothieno[2,3-c]quinoline-9-carboxamide, 5,6-dihydro-6-oxo-N-phenyl- (9CI) (CA INDEX NAME)



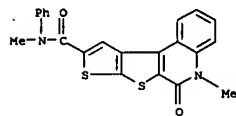
RN 163979-06-4 CAPLUS
 CN [1]Benzothieno[2,3-c]quinoline-9-carboxamide, 5,6-dihydro-N,5-dimethyl-6-oxo-N-phenyl- (9CI) (CA INDEX NAME)



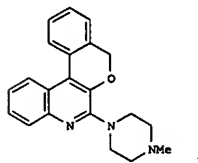
L11 ANSWER 34 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)
 RN 163979-10-0 CAPLUS
 CN Thieno[3',2':4,5]thieno[2,3-c]quinoline-9-carboxamide, 5,6-dihydro-6-oxo-N-phenyl- (9CI) (CA INDEX NAME)



RN 163979-11-1 CAPLUS
 CN Thieno[3',2':4,5]thieno[2,3-c]quinoline-9-carboxamide, 5,6-dihydro-N,5-dimethyl-6-oxo-N-phenyl- (9CI) (CA INDEX NAME)

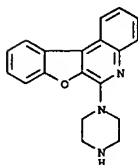


L11 ANSWER 35 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 1995:666997 CAPLUS
 DN 123:143807
 TI Novel, Potent, and Selective 5-HT₃ Receptor Antagonists Based on the Acylpiperazine Skeleton: Synthesis, Structure, Biological Activity, and Comparative Molecular Field Analysis Studies
 AU Anzini, Maurizio; Cappelli, Andrea; Vomero, Salvatore; Giorgi, Gianluca; Langer, Thierry; Hamon, Michel; Merahi, Nacera; Emerit, Boris M.; Cagnotto, Alfredo; et al.
 CS Dipartimento Farmaco Chimico Tecnologico, Universita di Siena, Siena, 53100, Fr.
 SO Journal of Medicinal Chemistry (1995), 38(14), 2692-704
 CODEN: JMCNAR; ISSN: 0022-2623
 PB American Chemical Society
 DT Journal
 LA English
 GI



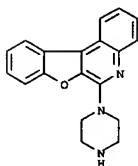
AB Synthesis and pharmacol. evaluation of a series of condensed quinoline derivs. bearing a basic nitrogen on piperazine or [(dimethylamino)ethyl]thio moieties attached at the 2-position of the quinoline nucleus were described. 5-HT receptor binding studies revealed, for most of the compds. studied, nanomolar affinity for the 5-HT₃ subtype. The most active compound, 7-(4-methyl-1-piperazinyl)[1]benzopyrano[3,4-c]quinoline (I), displayed a K_i value very similar to that reported for quipazine along with an improved selectivity. Functional and in vivo testing carried out on three selected compds. showed that I was a potent 5-HT₃ receptor antagonist with a potency in the same range as the best known 5-HT₃ receptor antagonists ondansetron, tropisetron, and zacopride. The crystal and mol. structure I was determined by single-crystal X-ray diffraction and used as starting structures for mol. modeling studies. Comparative mol. field anal. (CoMFA) was applied to binding consts. of compds. 5a-p and 6a-h. The cross-validated r₂, derived from partial least-squares calcs., indicated a good predictive capacity for affinity values in the series of compds. investigated. Evidence for the prediction capacity is provided in the form of plots of actual vs predicted pK_i values. The steric and electrostatic features of the CoMFA-derived model were presented as standard coefficient contour maps of steric

L11 ANSWER 35 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)
and electrostatic fields.
IT 165966-35-8P 165966-36-9P 165966-37-0P
165966-38-1P 165966-39-2P
RL: BAC (Biological activity or effector, except adverse); BSU
(Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)
(preparation of (aryl)piperazine derivs. as 5-HT3 receptor antagonists)
RN 165966-35-8 CAPLUS
CN Benzofuro[2,3-c]quinoline, 6-(1-piperazinyl)-, dihydrochloride (9CI) (CA INDEX NAME)



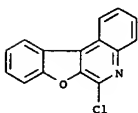
• 2 HCl

RN 165966-36-9 CAPLUS
CN Benzofuro[2,3-c]quinoline, 6-(1-piperazinyl)- (9CI) (CA INDEX NAME)

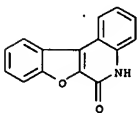


RN 165966-37-0 CAPLUS
CN Benzofuro[2,3-c]quinoline, 6-(4-methyl-1-piperazinyl)- (9CI) (CA INDEX NAME)

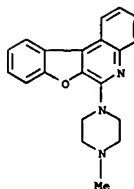
L11 ANSWER 35 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)
(prepn. of (aryl)piperazine derivs. as 5-HT3 receptor antagonists)
RN 128433-18-1 CAPLUS
CN Benzofuro[2,3-c]quinoline, 6-chloro- (9CI) (CA INDEX NAME)



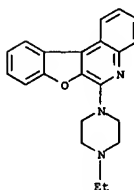
RN 128433-20-5 CAPLUS
CN Benzofuro[2,3-c]quinolin-6(5H)-one (9CI) (CA INDEX NAME)



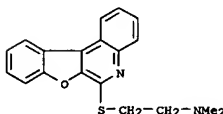
L11 ANSWER 35 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



RN 165966-38-1 CAPLUS
CN Benzofuro[2,3-c]quinoline, 6-(4-ethyl-1-piperazinyl)- (9CI) (CA INDEX NAME)

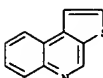


RN 165966-39-2 CAPLUS
CN Ethanamine, 2-(benzofuro[2,3-c]quinolin-6-ylthio)-N,N-dimethyl- (9CI) (CA INDEX NAME)

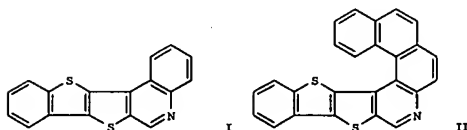


IT 128433-18-1P 128433-20-5P, Benzofuro[2,3-c]quinolin-6(5H)-one
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

L11 ANSWER 36 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN
AN 1995:628107 CAPLUS
DN 123:82711
TI Structural chemistry of polycyclic heteroaromatic compounds. Part 6. Photoelectron spectra and electronic structures of polycyclic heptarenes: thienoquinolines and thienoisquinolines
AU Marzinik, A. L.; Rademacher, P.
CS Institute of Organic Chemistry, University of Essen, Essen, D-45117, Germany
SO Journal of Molecular Structure (1995), 351, 107-17
CODEN: JMOSEB4; ISSN: 0022-2860
PB Elsevier
DT Journal
LA English
AB The He(I) photoelectron spectra of 13 isomeric thienoquinolines and thienoisquinolines and the π -isoelectronic naphthothiophenes are reported and discussed. The assignments for the latter compds. are made by using the sulfur double-bond model taking phenanthrene (I) as the reference
mol. The shape and the energies of the π MOs of thienoquinolines and thienoisquinolines can be estimated from those of I by first-order perturbation theory. This concept is very useful for distinguishing isomeric thienoquinolines and thienoisquinolines.
IT 233-04-S, Thieno[2,3-c]quinoline
RL: PRP (Properties)
(photoelectron spectra and electronic structures of thienoquinolines, thienoisquinolines, and naphthothiophenes)
RN 233-04-5 CAPLUS
CN Thieno[2,3-c]quinoline (8CI, 9CI) (CA INDEX NAME)

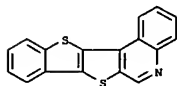


L11 ANSWER 37 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 1995:548875 CAPLUS
 DN 123:112017
 TI The synthesis of novel polycyclic heterocyclic ring systems via photocyclization. 16. [1]Benzo[thieno[2',3':4,5]thieno[2,3-c]quinoline and [1]benzo[thieno[2',3':4,5]thieno[2,3-c]naphtho[1,2-f]quinoline
 AU Luo, Jiann-Kuan; Federspiel, Ronald F.; Castle, Raymond N.
 CS Department of Chemistry, University of South Florida, Tampa, FL, 33620-5250, USA
 SO Journal of Heterocyclic Chemistry (1995), 32(2), 659-64
 CODEN: JHCTAD; ISSN: 0022-152X
 PB HeteroCorporation
 DT Journal
 LA English
 GI



AB The synthesis of two previously unknown polycyclic heterocyclic ring systems I and II via photocyclization is described. The unequivocal assignment of their proton and carbon spectra was achieved by utilizing two-dimensional NMR techniques.

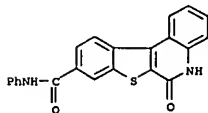
IT 166193-33-5P
 RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation) (preparation of)
 RN 166193-33-5 CAPLUS
 CN [1]Benzo[thieno[2',3':4,5]thieno[2,3-c]quinoline (9CI) (CA INDEX NAME)



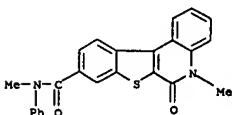
IT 166193-38-0P
 RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation) (preparation of polycyclic heterocyclic rings via photochem. cyclization)
 RN 166193-38-0 CAPLUS
 CN [1]Benzo[thieno[2',3':4,5]thieno[2,3-c]naphtho[1,2-f]quinoline (9CI) (CA INDEX NAME)

L11 ANSWER 38 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 1995:493286 CAPLUS
 DN 123:32527
 TI Mass spectral fragmentation patterns of some new benzo[b]thiophene- and thieno[2,3-b]thiophene-2,5-dicarbonyl dichlorides and -dicarbonyldianilides and anilidoquinolones
 AU Karminski-Zamola, Grace; Dogan, Jasna; Boykin, David W.; Bajic, Miro
 CS Fac. Chem. Eng. Technol., Univ. Zagreb, Zagreb, 41000, Croatia
 SO Rapid Communications in Mass Spectrometry (1995), 9(4), 282-8
 CODEN: RCHSEF; ISSN: 0951-4198
 PB Wiley
 DT Journal
 LA English
 AB The electron impact mass spectra of some benzo[b]thiophene- and thieno[2,3-b]thiophene-2,5-dicarbonyl dichlorides, -2,5-dicarbonyldianilides, 9-anilidobenzo[b]thienyl[2,3-c]quinolones, and 9-anilidothieno[4,5-b']thienyl[2,3-c]quinolones are discussed. Dominant peaks in dianilides are formed by cleavage of the C-N bond on one side of the anilido group, as well as on the anilido group itself in anilidoquinolones. These ions fragment further by the cleavage of a C-C bond in dianilides and the CONRPh group is lost directly, while the quinolonic part of the mol. in quinolones fragments with low probability. Characteristic fragment ions of dicarbonyl dichlorides arise by the cleavage of the C-Cl bond.

IT 163979-05-3 163979-06-4 163979-10-0
 163979-11-1
 RL: FRP (Properties)
 (mass spectra of benzothienophene- and thienothiophenedicarbonyl dichlorides, -dicarbonyldianilides, and anilidoquinolones)
 RN 163979-05-3 CAPLUS
 CN [1]Benzo[thieno[2,3-c]quinoline-9-carboxamide, 5,6-dihydro-6-oxo-N-phenyl- (9CI) (CA INDEX NAME)



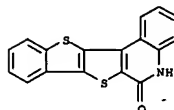
RN 163979-06-4 CAPLUS
 CN [1]Benzo[thieno[2,3-c]quinoline-9-carboxamide, 5,6-dihydro-N,5-dimethyl-6-oxo-N-phenyl- (9CI) (CA INDEX NAME)



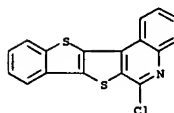
RN 163979-10-0 CAPLUS
 CN Thieno[3',2':4,5]thieno[2,3-c]quinoline-9-carboxamide,

L11 ANSWER 37 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
 IT 166193-36-8P 166193-37-9P 166193-40-4P
 166193-41-5P 166193-42-6P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
 (preparation of polycyclic heterocyclic rings via photochem. cyclization)
 RN 166193-36-8 CAPLUS
 CN [1]Benzo[thieno[2',3':4,5]thieno[2,3-c]quinolin-6(5H)-one (9CI) (CA INDEX NAME)



RN 166193-37-9 CAPLUS
 CN [1]Benzo[thieno[2',3':4,5]thieno[2,3-c]quinoline, 6-chloro- (9CI) (CA INDEX NAME)



RN 166193-40-4 CAPLUS
 CN [1]Benzo[thieno[2',3':4,5]thieno[2,3-c]naphtho[1,2-f]quinolin-6(5H)-one (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

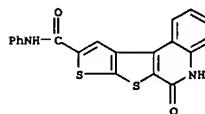
RN 166193-41-5 CAPLUS
 CN [1]Benzo[thieno[2',3':4,5]thieno[2,3-c]naphtho[1,2-f]quinoline, 6-chloro- (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

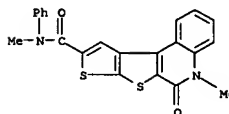
RN 166193-42-6 CAPLUS
 CN [1]Benzo[thieno[2',3':4,5]thieno[2,3-c]naphtho[1,2-f]quinolin-6(5H)-one, hydrazone (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

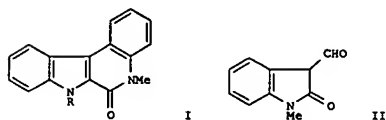
L11 ANSWER 38 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)
 5,6-dihydro-6-oxo-N-phenyl- (9CI) (CA INDEX NAME)



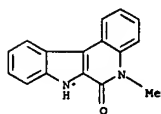
RN 163979-11-1 CAPLUS
 CN Thieno[3',2':4,5]thieno[2,3-c]quinoline-9-carboxamide, 5,6-dihydro-N,5-dimethyl-6-oxo-N-phenyl- (9CI) (CA INDEX NAME)



L11 ANSWER 39 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 1995:393120 CAPLUS
 DN 122:290736
 TI Synthesis of 5,7-dihydro-6H-indolo[2,3-c]quinolin-6-ones
 AU Tokmakov, G. P.; Zemlyanova, T. G.; Grandberg, I. I.
 CS Mosk. S-Kh. Akad., Moscow, Russia
 SO Khimiya Geterotsiklicheskikh Soedinenii (1994), (4), 495-8
 CODEN: KGSSAQ; ISSN: 0132-6244
 PB Latviiskii Institut Organicheskogo Sintesa
 DT Journal
 LA Russian
 GI

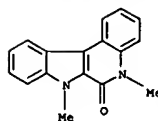


AB Title compds. I (R = H, Me, Ph, PhCH₂) were prepared by reaction of
 formylindolone II with PhNRNH₂.
 IT 52865-41-5P 163126-76-9P 163126-77-0P
 163126-78-1P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation of)
 RN 52865-41-5 CAPLUS
 CN 6H-Indolo[2,3-c]quinolin-6-one, 5,7-dihydro-5-methyl- (9CI) (CA INDEX NAME)

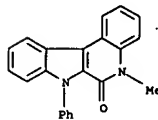


RN 163126-76-9 CAPLUS
 CN 6H-Indolo[2,3-c]quinolin-6-one, 5,7-dihydro-5,7-dimethyl- (9CI) (CA INDEX NAME)

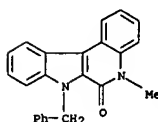
L11 ANSWER 39 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



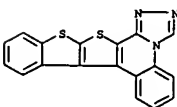
RN 163126-77-0 CAPLUS
 CN 6H-Indolo[2,3-c]quinolin-6-one, 5,7-dihydro-5-methyl-7-phenyl- (9CI) (CA INDEX NAME)



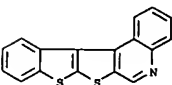
RN 163126-78-1 CAPLUS
 CN 6H-Indolo[2,3-c]quinolin-6-one, 5,7-dihydro-5-methyl-7-(phenylmethyl)- (9CI) (CA INDEX NAME)



L11 ANSWER 40 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 1995:389478 CAPLUS
 DN 122:290827
 TI The synthesis of novel polycyclic heterocyclic ring systems via
 photocyclization. 15. [1]Benzothieno[3',2':4,5]thieno[2,3-c]quinoline,
 [1]benzothieno[3',2':4,5]thieno[2,3-c][1,2,4]triazolo[4,3-a]quinoline,
 [1]benzothieno[3',2':4,5]thieno[2,3-c]tetrazolo[1,5-a]quinoline,
 thieno[3',2':4,5]thieno[1,3-c][1,2,4]triazolo[4,3-a]quinoline, and
 thieno[3',2':4,5]thieno[2,3-c]tetrazolo[1,5-a]quinoline
 Luo, Jiann-Kuan; Kudo, Hirotsuka; Federspiel, Ronald F.; Castle, Raymond
 AU Dep. Chem., Univ. South Florida, Tampa, FL, 33620-5250, USA
 N. Journal of Heterocyclic Chemistry (1995), 32(1), 317-22
 SO CODEN: JHTCAD; ISSN: 0022-152X
 PB HeteroCorporation
 DT Journal
 LA English
 OS CASREACT 122:290827
 AB The synthesis of five novel polycyclic heterocyclic ring systems via
 photocyclization is reported. These are
 [1]benzothieno[3',2':4,5]thieno[2,3-c]quinoline,
 [1]benzothieno[3',2':4,5]thieno[2,3-c][1,2,4]triazolo[4,3-a]quinoline,
 [1]benzothieno[3',2':4,5]thieno[2,3-c]tetrazolo[1,5-a]quinoline,
 thieno[3',2':4,5]thieno[2,3-c][1,2,4]triazolo[4,3-a]quinoline, and
 thieno[3',2':4,5]thieno[2,3-c]tetrazolo[1,5-a]quinoline.
 The total assignments of the 1H and 13C NMR spectra of products and of
 thieno[3',2':4,5]thieno[2,3-c]quinoline were determined by utilizing
 two-dimensional NMR methods.
 IT 163126-55-4P 163126-62-3P 163126-63-4P
 163126-64-5P 163126-65-6P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation of)
 RN 163126-55-4 CAPLUS
 CN [1]Benzothieno[3',2':4,5]thieno[2,3-c]-1,2,4-triazolo[4,3-a]quinoline
 (9CI) (CA INDEX NAME)

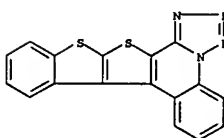


RN 163126-62-3 CAPLUS
 CN [1]Benzothieno[3',2':4,5]thieno[2,3-c]quinoline (9CI) (CA INDEX NAME)

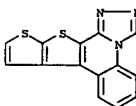


RN 163126-63-4 CAPLUS

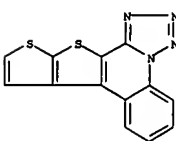
L11 ANSWER 40 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)
 CN [1]Benzothieno[3',2':4,5]thieno[2,3-c]tetrazolo[1,5-a]quinoline (9CI)
 (CA INDEX NAME)



RN 163126-64-5 CAPLUS
 CN Thieno[3',2':4,5]thieno[2,3-c]-1,2,4-triazolo[4,3-a]quinoline (9CI) (CA INDEX NAME)

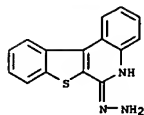


RN 163126-65-6 CAPLUS
 CN Tetrazolo[1,5-a]thieno[3',2':4,5]thieno[2,3-c]quinoline (9CI) (CA INDEX NAME)

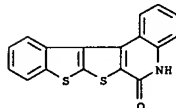


IT 115172-88-8
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (preparation of polycyclic heterocyclic rings via photochem.
 cyclization reaction)
 RN 115172-88-8 CAPLUS
 CN [1]Benzothieno[2,3-c]quinolin-6(5H)-one, hydrazone (9CI) (CA INDEX NAME)

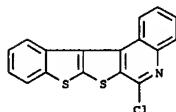
L11 ANSWER 40 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



IT 163126-58-7P 163126-59-8P 163126-60-1P
 163126-61-2P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
 (Reactant or reagent)
 (preparation of polycyclic heterocyclic rings via photochem.
 cyclization
 reaction)
 RN 163126-58-7 CAPLUS
 CN [1]Benzo[thieno[3',2':4,5]thieno[2,3-c]quinolin-6(5H)-one (9CI) (CA INDEX
 NAME)



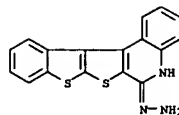
RN 163126-59-8 CAPLUS
 CN [1]Benzo[thieno[3',2':4,5]thieno[2,3-c]quinoline, 6-chloro- (9CI) (CA
 INDEX NAME)



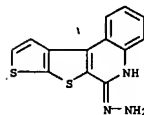
RN 163126-60-1 CAPLUS
 CN [1]Benzo[thieno[3',2':4,5]thieno[2,3-c]quinolin-6(5H)-one, hydrazone (9CI)
 (CA INDEX NAME)

L11 ANSWER 40 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

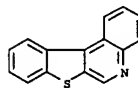
L11 ANSWER 40 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



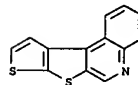
RN 163126-61-2 CAPLUS
 CN Thieno[3',2':4,5]thieno[2,3-c]quinolin-6(5H)-one, hydrazone (9CI) (CA
 INDEX NAME)



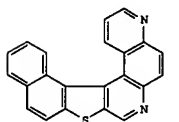
IT 57289-92-6P, [1]Benzo[thieno[2,3-c]quinoline 120122-06-7P
 , Thieno[3',2':4,5]thieno[2,3-c]quinoline
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation of polycyclic heterocyclic rings via photochem.
 cyclization
 reaction)
 RN 57289-92-6 CAPLUS
 CN [1]Benzo[thieno[2,3-c]quinoline (9CI) (CA INDEX NAME)



RN 120122-06-7 CAPLUS
 CN Thieno[3',2':4,5]thieno[2,3-c]quinoline (9CI) (CA INDEX NAME)

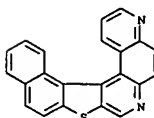


L11 ANSWER 41 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 1994:298593 CAPLUS
 DN 120:298593
 TI The synthesis of novel polycyclic heterocyclic ring systems via
 photocyclization. 10. Synthesis and structure determination of
 naphtho[1',2':4,5]thieno[3,2-a]-4,7-phenanthroline
 AU Musmar, M. J.; Zektzer, Andrew S.; Castle, Raymond N.
 CS Dep. Chem., Univ. South Florida, Tampa, FL, 33620, USA
 SO Journal of Heterocyclic Chemistry (1993), 30(2), 487-92
 CODEN: JHTCAD; ISSN: 0022-152X
 DT Journal
 LA English
 GI



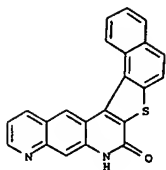
AB Naphtho[1',2':4,5]thieno[3,2-a]-4,7-phenanthroline (I), a novel
 hexacyclic
 ring system was prepared in 4 steps. The 1H and 13C NMR assignments were
 made using 2-dimensional NMR techniques. The tertiary helical structure
 was determined by x-ray crystallog. anal.

IT 154160-34-6P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation and crystal and mol. structure (helix))
 RN 154160-34-6 CAPLUS
 CN Naphtho[1',2':4,5]thieno[3,2-a]-4,7-phenanthroline (9CI) (CA INDEX NAME)

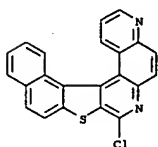


IT 154160-32-4 154160-33-5
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (preparation as intermediate for naphthothienophenanthroline)
 RN 154160-32-4 CAPLUS
 CN Naphtho[1',2':4,5]thieno[2,3-c]pyrido[3,2-g]quinolin-8(9H)-one (9CI) (CA
 INDEX NAME)

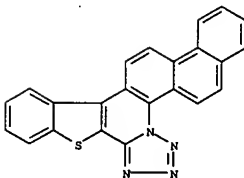
L11 ANSWER 41 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



RN 154160-33-5 CAPLUS
CN Naphtho[1',2':4,5]thieno[3,2-a]-4,7-phenanthroline, 8-chloro- (9CI) (CA INDEX NAME)



L11 ANSWER 42 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



L11 ANSWER 42 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN

AN 1994:298506 CAPLUS
DN 120:298506

TI Complete assignment of the 1H- and 13C-NMR spectra of [1]benzothieno[2,3-c]naphtho[1,2-h]quinoline and [1]benzothieno[2,3-c]naphtho[1,2-h][1,2,4]triazolo[4,3-a]quinoline. Concerted use of two-dimensional NMR techniques

AU Sasaki, Kenji; Castle, Lyle W.; Castle, Raymond N.
CS Dep. Chem., Univ. South Florida, Tampa, FL, 33620-5250, USA
SO Journal of Heterocyclic Chemistry (1994), 31(1), 65-71
CODEN: JHTCAD; ISSN: 0022-152X

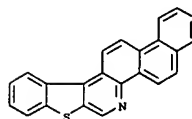
DT Journal
LA English

AB The 1H- and 13C-NMR spectra of [1]benzothieno[2,3-c]naphtho[1,2-h]quinoline and [1]benzothieno[2,3-c]naphtho[1,2-h][1,2,4]triazolo[4,3-a]quinoline were totally assigned using a combination of two-dimensional NMR techniques. After correlation of the proton signals by a COSY spectrum and one-bond heteronuclear correlation, complete assignment of the 1H- and 13C-NMR spectra of the novel heterocyclic compds. required

the application of long-range CH coupling information particularly for quaternary resonance assignments and the orientations of individual spin systems relative to one another.

IT 146791-77-7 155200-84-3
RL: PRP (Properties)
(NMR of)

RN 146791-77-7 CAPLUS
CN [1]Benzothieno[2,3-c]naphtho[1,2-h]quinoline (9CI) (CA INDEX NAME)



RN 155200-84-3 CAPLUS
CN [1]Benzothieno[2,3-c]naphtho[1,2-h]tetrazolo[1,5-a]quinoline (9CI) (CA INDEX NAME)

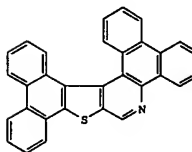
L11 ANSWER 43 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN

AN 1994:270174 CAPLUS
DN 120:270174

TI The synthesis of novel polycyclic heterocyclic ring systems via photocyclization. 13. Dibenzo[f,h]phenanthro[9',10':4,5]thieno[2,3-c]quinoline

AU Luo, Jiann Kuan; Castle, Raymond N.
CS Dep. Chem., Univ. South Florida, Tampa, FL, 33620-5250, USA
SO Journal of Heterocyclic Chemistry (1993), 30(5), 1167-72
CODEN: JHTCAD; ISSN: 0022-152X

DT Journal
LA English
OS CASREACT 120:270174
GI



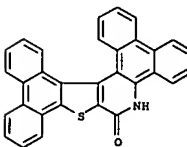
AB The synthesis of a previously unknown polycyclic heterocyclic ring system, dibenzo[f,h]phenanthro[9',10':4,5]thieno[2,3-c]quinoline (I), was accomplished via photocyclization of the appropriate amide followed by chlorination. Substitution of the chlorine atom with hydrazine followed by removal of the hydrazine moiety with 10% copper sulfate solution

afforded the parent ring system I. The unequivocal assignment of its highly congested 1H and 13C spectra was accomplished by utilizing

two-dimensional NMR methods.

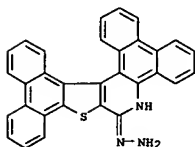
IT 154495-60-02
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and chlorination of)

RN 154495-60-0 CAPLUS
CN Dibenzo[f,h]phenanthro[9',10':4,5]thieno[2,3-c]quinolin-10(9H)-one (9CI) (CA INDEX NAME)

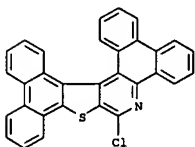


L11 ANSWER 43 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

IT 154495-62-2P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation and hydrazine removal of)
 RN 154495-62-2 CAPLUS
 CN Dibenzo[f,h]phenanthro[9',10':4,5]thieno[2,3-c]quinolin-10(9H)-one,
 hydrazone (9CI) (CA INDEX NAME)



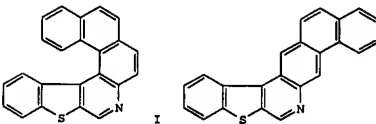
IT 154495-61-1P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
 (Reactant or reagent)
 (preparation and reaction with hydrazine)
 RN 154495-61-1 CAPLUS
 CN Dibenzo[f,h]phenanthro[9',10':4,5]thieno[2,3-c]quinoline, 10-chloro-
 (9CI) (CA INDEX NAME)



IT 154495-63-3P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation of)
 RN 154495-63-3 CAPLUS
 CN Dibenzo[f,h]phenanthro[9',10':4,5]thieno[2,3-c]quinoline (9CI) (CA INDEX
 NAME)

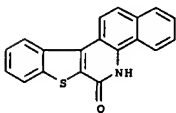
L11 ANSWER 44 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN

AN 1594:243952 CAPLUS
 DN 120:243952
 TI The synthesis of novel polycyclic heterocyclic ring systems via
 photocyclization. 11. Synthesis and total assignment of the proton and
 carbon-13 NMR spectra of isomeric benzothenonaphthoquinolines using
 multiple inverse detected two-dimensional NMR methods
 AU Luo, Jiann Kuan; Zektzer, Andrew S.; Castle, Raymond N.; Crouch, Ronald
 C.; Shockcor, John P.; Martin, Gary E.
 CS Dep. Chem., Univ. South Florida, Tampa, FL, 33620-5250, USA
 SO Journal of Heterocyclic Chemistry (1993), 30(2), 453-60
 CODEN: JHTCAD; ISSN: 0022-152X
 DT Journal
 LA English
 GI



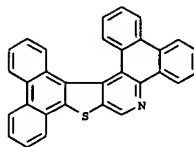
AB Two novel heterocyclic ring systems, [1]benzothieno[2,3-c]naphtho[1,2-
 f]quinoline (I) and [1]benzothieno[2,3-c]naphtho[2,1-g]quinoline (II)
 were prepared and characterized by inverse detected 2 dimensional NMR methods.
 Unequivocal total assignments of the proton and C NMR spectra were made
 through the concerted use of HMQC (Heteronuclear Multiple Quantum
 Correlation) and a combination of HMBC (Heteronuclear Multiple Bond
 Correlation) and HMQC-TOCSY (HMQC with proton Total Correlation
 Spectroscopy).

IT 65469-37-6 130251-05-7 153935-94-5
 153935-95-6
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (preparation as intermediate for benzothenonaphthoquinoline)
 RN 65469-37-6 CAPLUS
 CN Benzo[h][1]benzothieno[2,3-c]quinolin-6(5H)-one (9CI) (CA INDEX NAME)

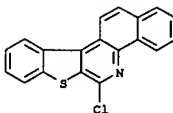


RN 130251-05-7 CAPLUS
 CN Benzo[h][1]benzothieno[2,3-c]quinoline, 6-chloro- (9CI) (CA INDEX NAME)

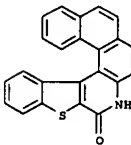
L11 ANSWER 43 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



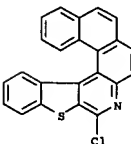
L11 ANSWER 44 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



RN 153935-94-5 CAPLUS
 CN [1]Benzotheno[2,3-c]naphtho[1,2-f]quinolin-6(5H)-one (9CI) (CA INDEX
 NAME)

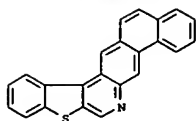


RN 153935-95-6 CAPLUS
 CN [1]Benzotheno[2,3-c]naphtho[1,2-f]quinoline, 6-chloro- (9CI) (CA INDEX
 NAME)

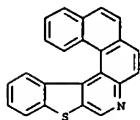


IT 142094-01-7P 153935-93-4P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation of)
 RN 142094-01-7 CAPLUS
 CN [1]Benzotheno[2,3-c]naphtho[2,1-g]quinoline (9CI) (CA INDEX NAME)

L11 ANSWER 44 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

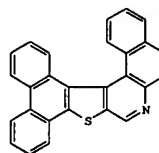
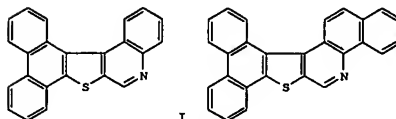


RN 153935-93-4 CAPLUS
CN [1]Benzo[h]phenanthro[9',10':4,5]thieno[2,3-c]quinoline (9CI) (CA INDEX NAME)



L11 ANSWER 45 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN

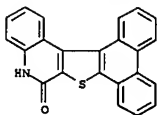
AN 1994:217326 CAPLUS
DN 120:217326
TI Synthesis of novel polycyclic heterocyclic ring systems via photocyclization. 9. Phenanthro[9',10':4,5]thieno[2,3-c]quinoline, benzo[f]phenanthro[9',10':4,5]thieno[2,3-c]quinoline, and benzo[h]phenanthro[9',10':4,5]thieno[2,3-c]quinoline
AU Camoutsis, Charalampos; Castle, Raymond N.
CS Dep. Chem., Univ. South Florida, Tampa, FL, 33620-5250, USA
SO Journal of Heterocyclic Chemistry (1993), 30(1), 153-6
CODEN: JHCTAD; ISSN: 0022-152X
DT Journal
LA English
GI



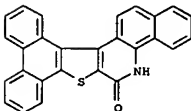
III

AB The synthesis of three novel polycyclic heterocyclic ring systems are reported via photocyclization of 3-chlorophenanthro[9,10-b]thiophene-2-carboxamides. The specific final products in these ring systems are: phenanthro[9',10':4,5]thieno[2,3-c]quinoline (I), benzo[h]phenanthro[9',10':4,5]thieno[2,3-c]quinoline (II), and benzo[f]phenanthro[9',10':4,5]thieno[2,3-c]quinoline (III).
IT 153488-79-0P 153488-80-3P 153488-81-4P
153488-82-5P 153488-83-6P 153488-84-7P
RL: SPN (Synthetic preparation); PREP (Preparation)
(intermediate in preparation of polycyclic heterocyclic ring systems
via photocyclization)
RN 153488-79-0 CAPLUS
CN Phenanthro[9',10':4,5]thieno[2,3-c]quinolin-10(11H)-one (9CI) (CA INDEX NAME)

L11 ANSWER 45 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



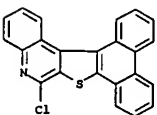
RN 153488-80-3 CAPLUS
CN Benzo[h]phenanthro[9',10':4,5]thieno[2,3-c]quinolin-6(5H)-one (9CI) (CA INDEX NAME)



RN 153488-81-4 CAPLUS
CN Benzo[f]phenanthro[9',10':4,5]thieno[2,3-c]quinolin-8(7H)-one (9CI) (CA INDEX NAME)

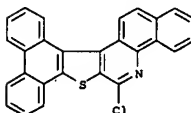
*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 153488-82-5 CAPLUS
CN Phenanthro[9',10':4,5]thieno[2,3-c]quinoline, 10-chloro- (9CI) (CA INDEX NAME)



RN 153488-83-6 CAPLUS
CN Benzo[h]phenanthro[9',10':4,5]thieno[2,3-c]quinoline, 6-chloro- (9CI) (CA INDEX NAME)

L11 ANSWER 45 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

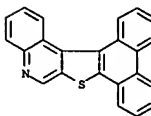


RN 153488-84-7 CAPLUS
CN Benzo[f]phenanthro[9',10':4,5]thieno[2,3-c]quinoline, 8-chloro- (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

IT 147031-40-1P 147031-41-2P 147031-42-3P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)

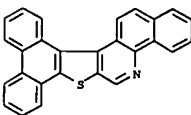
RN 147031-40-1 CAPLUS
CN Phenanthro[9',10':4,5]thieno[2,3-c]quinoline (9CI) (CA INDEX NAME)



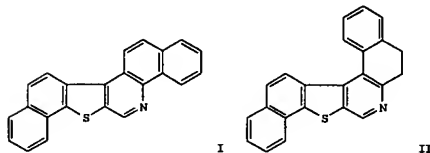
RN 147031-41-2 CAPLUS
CN Benzo[f]phenanthro[9',10':4,5]thieno[2,3-c]quinoline (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

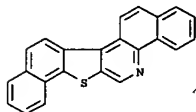
RN 147031-42-3 CAPLUS
CN Benzo[h]phenanthro[9',10':4,5]thieno[2,3-c]quinoline (9CI) (CA INDEX NAME)



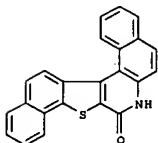
L11 ANSWER 46 OF 162 CAPLUS COPYRIGHT 2005 ACS ON STN
 AN 1994:191675 CAPLUS
 DN 120:191675
 TI The synthesis of novel polycyclic heterocyclic ring systems via photocyclization. 12. Benzo[h]naphtho[2',1':4,5]thieno[2,3-c]quinoline and
 and benzo[f]naphtho[2',1':4,5]thieno[2,3-c]quinoline
 AU Luo, Jiann Kuan; Castle, Steven L.; Castle, Raymond N.
 CS Dep. Chem., Univ. South Florida, Tampa, FL, 33620-5250, USA
 SO Journal of Heterocyclic Chemistry (1993), 30(3), 653-8
 CODEN: JHCTAD; ISSN: 0022-152X
 DT Journal
 LA English
 GI



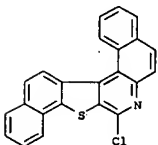
AB The preparation of 2 previously unknown heterocyclic ring systems, benzo[h]naphtho[2',1':4,5]thieno[2,3-c]quinoline (I) and benzo[f]naphtho[2',1':4,5]thieno[2,3-c]quinoline (II) was accomplished via photocyclization of the appropriate amides followed by chlorination and catalytic dechlorination. The total assignment of 1H and 13C NMR spectra of II was determined using 2-dimensional NMR methods, providing unequivocal structural proof of the 2 novel polycyclic ring systems.
 IT 153524-77-7P, Benzo[h]naphtho[2',1':4,5]thieno[2,3-c]quinoline
 153524-78-8P, Benzo[f]naphtho[2',1':4,5]thieno[2,3-c]quinoline
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation of)
 RN 153524-77-7 CAPLUS
 CN Benzo[h]naphtho[2',1':4,5]thieno[2,3-c]quinoline (9CI) (CA INDEX NAME)



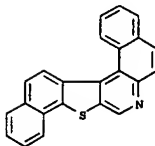
L11 ANSWER 46 OF 162 CAPLUS COPYRIGHT 2005 ACS ON STN (Continued)



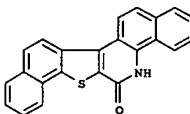
RN 153524-76-6 CAPLUS
 CN Benzo[f]naphtho[2',1':4,5]thieno[2,3-c]quinoline, 8-chloro- (9CI) (CA INDEX NAME)



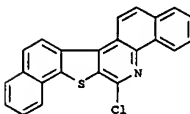
L11 ANSWER 46 OF 162 CAPLUS COPYRIGHT 2005 ACS ON STN (Continued)
 RN 153524-78-8 CAPLUS
 CN Benzo[f]naphtho[2',1':4,5]thieno[2,3-c]quinoline (9CI) (CA INDEX NAME)



IT 153524-72-2P 153524-73-3P 153524-75-5P
 153524-76-6P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation of, as intermediate for benzonaphthothienoquinoline)
 RN 153524-72-2 CAPLUS
 CN Benzo[h]naphtho[2',1':4,5]thieno[2,3-c]quinolin-6(5H)-one (9CI) (CA INDEX NAME)

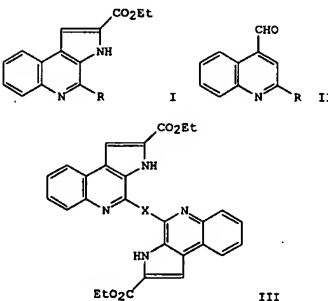


RN 153524-73-3 CAPLUS
 CN Benzo[h]naphtho[2',1':4,5]thieno[2,3-c]quinoline, 6-chloro- (9CI) (CA INDEX NAME)



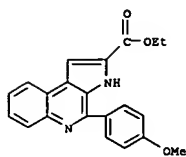
RN 153524-75-5 CAPLUS
 CN Benzo[h]naphtho[2',1':4,5]thieno[2,3-c]quinolin-8(7H)-one (9CI) (CA INDEX NAME)

L11 ANSWER 47 OF 162 CAPLUS COPYRIGHT 2005 ACS ON STN
 AN 1993:449257 CAPLUS
 DN 119:49257
 TI A facile synthesis of some new 3H-pyrrolo[2,3-c]quinoline derivatives from
 4-formylquinolines
 AU Molina, Pedro; Alajarín, Mateo; Sánchez-Andrada, Pilar
 CS Fac. Quím., Univ. Murcia, Murcia, E-30071, Spain
 SO Synthesis (1993), (2), 225-8
 CODEN: SYNTBF; ISSN: 0039-7881
 DT Journal
 LA English
 OS CASREACT 119:49257
 GI

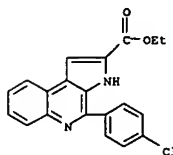


AB A number of Et 3H-pyrrolo[2,3-c]quinoline-2-carboxylates I (R = 4-MeOC6H4, 4-Cl, 4-pyridyl, Ph, 4-tolyl, 4-O2NC6H4) were prepared directly by condensation of Et azidoacetate with 4-formylquinolines II, available from
 o-(1-methylethenyl)aniline by sequential treatment with acid chlorides ROCl, phosphorus oxychloride and benzeneseleninic anhydride. This methodol. was also used to synthesize
 2,2'-bis(ethoxycarbonyl)-4,4'-bi-3H-pyrrolo[2,3-c]quinoline (III; X = bond) and 1,4-bis(2-ethoxycarbonyl)-3H-pyrrolo[2,3-c]quinolin-4-ylbenzene III (X = 1,4-phenylene).
 IT 148336-13-4P 148336-26-9P 148336-27-0P
 148336-28-1P 148336-29-2P 148575-68-2P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation of)
 RN 148336-13-4 CAPLUS
 CN 3H-Pyrrolo[2,3-c]quinoline-2-carboxylic acid, 4-(4-methoxyphenyl)-, ethyl ester (9CI) (CA INDEX NAME)

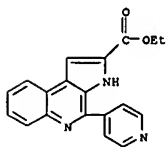
L11 ANSWER 47 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



RN 148336-26-9 CAPLUS
 CN 3H-Pyrrolo[2,3-c]quinoline-2-carboxylic acid, 4-(4-chlorophenyl)-, ethyl ester (9CI) (CA INDEX NAME)

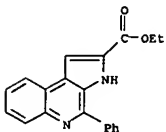


RN 148336-27-0 CAPLUS
 CN 3H-Pyrrolo[2,3-c]quinoline-2-carboxylic acid, 4-(4-pyridinyl)-, ethyl ester (9CI) (CA INDEX NAME)

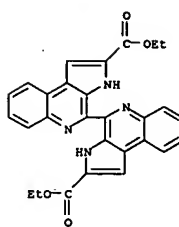


RN 148336-28-1 CAPLUS
 CN [4,4'-Bi-3H-pyrrolo[2,3-c]quinoline]-2,2'-dicarboxylic acid, diethyl ester (9CI) (CA INDEX NAME)

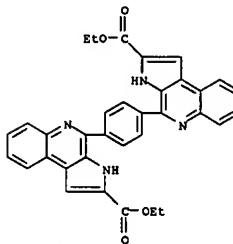
L11 ANSWER 47 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



L11 ANSWER 47 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



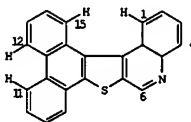
RN 148336-29-2 CAPLUS
 CN 3H-Pyrrolo[2,3-c]quinoline-2-carboxylic acid, 4,4'-(1,4-phenylene)bis-, diethyl ester (9CI) (CA INDEX NAME)



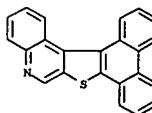
RN 148575-68-2 CAPLUS
 CN 3H-Pyrrolo[2,3-c]quinoline-2-carboxylic acid, 4-phenyl-, ethyl ester (9CI) (CA INDEX NAME)

L11 ANSWER 48 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN

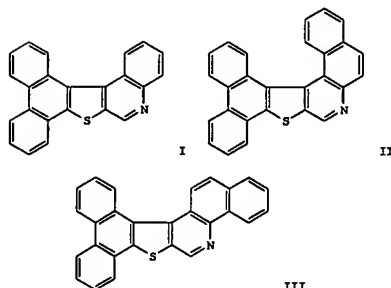
AN 1993:212355 CAPLUS
 DN 118:212355
 TI The HMQC-NOESY experiment without decoupling during acquisition for detection of NOE between pseudoequivalent protons
 AU Castle, Lyle W.; Johnston, Milton D., Jr.; Camoutsis, Charalampos L.; Castle, Raymond N.
 CS Dep. Chem., Univ. South Florida, Tampa, FL, 33620-5250, USA
 SO Journal of Heterocyclic Chemistry (1992), 29(7), 1869-71
 CODEN: JHTCAD; ISSN: 0022-152X
 DT Journal
 LA English
 GI



AB The pseudo-sym. structure of benzo[f]phenanthro[9',10':4,5]thieno[2,3-c]quinoline (I) causes overlap of the resonances corresponding to H(1) and H(15) and also those of H(11) and H(12). The observation of NOE between these pseudo-equivalent protons using the HMQC-NOESY experiment is acquired without decoupling during acquisition.
 IT 147031-40-1
 RL: PRP (Properties)
 (observation of pseudoequiv. protons in NMR of, by NOE)
 RN 147031-40-1 CAPLUS
 CN Phenanthro[9',10':4,5]thieno[2,3-c]quinoline (9CI) (CA INDEX NAME)

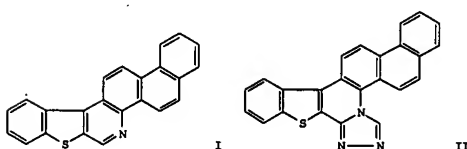


L11 ANSWER 49 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 1993:212354 CAPLUS
 DN 118:212354
 TI Assignments of the proton and carbon-13 NMR spectra of pseudosymmetric heterocycles using the HMQC-TOCSY experiment to differentiate overlapping spin systems
 AU Castle, Lyle W.; Johnston, Milton D., Jr.; Camoutsis, Charalampos L.; Castle, Raymond N.
 CS Dep. Chem., Univ. South Florida, Tampa, FL, 33620-5250, USA
 SO Journal of Heterocyclic Chemistry (1992), 29(7), 1805-15
 CODEN: JHTCAD; ISSN: 0022-152X
 DT Journal
 LA English
 GI

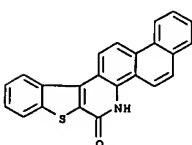


AB The ¹H NMR spectra of phenanthro[9'',10'':4,5]thieno[2,3-c]quinoline (I), benzo[f]phenanthro[9'',10'':4,5]thieno[2,3-c]quinoline (II), and benzo[h]phenanthro[9'',10'':4,5]thieno[2,3-c]quinoline (III) are highly congested. For each compound, all protons abide in an aromatic environment complicated by pseudo-sym. regions which result in multiple overlap of the different spin systems these mols. contain. The utility of the HMQC-TOCSY experiment to identify spin systems when the proton spectrum is highly congested is demonstrated. To complete the assignment of the ¹H and ¹³C NMR spectra of each compound the HMBC experiment is used to assign the quaternary carbons.
 IT 147031-40-1 147031-41-2 147031-42-3
 RL: PRP (Properties)

L11 ANSWER 50 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 1993:169044 CAPLUS
 DN 118:169044
 TI The synthesis of novel polycyclic heterocyclic ring systems via photocyclization. 8. [1]Benzo[thieno[2,3-c]naphtho[1,2-h]quinoline and [1]benzo[thieno[2,3-c]naphtho[1,2-h]triazolo[4,3-a]quinoline
 AU Sasaki, Kenji; Castle, Raymond N.
 CS Dep. Chem., Univ. South Florida, Tampa, FL, 33620-5250, USA
 SO Journal of Heterocyclic Chemistry (1992), 29(6), 1613-15
 CODEN: JHTCAD; ISSN: 0022-152X
 DT Journal
 LA English
 OS CASREACT 118:169044
 GI

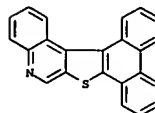


AB The previously unknown polycyclic heterocyclic ring systems, namely, [1]benzo[thieno[2,3-c]naphtho[1,2-h]quinoline (I) and [1]benzo[thieno[2,3-c]naphtho[1,2-h]triazolo[4,3-a]quinoline (II) were synthesized via photocyclization of 3-chloro-N-(1'-phenanthryl)benzo[b]thiophene-2-carboxamide.
 IT 146791-74-4P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
 (preparation and chlorination of)
 RN 146791-74-4 CAPLUS
 CN [1]Benzo[thieno[2,3-c]naphtho[1,2-h]quinolin-8(7H)-one (9CI) (CA INDEX NAME)



IT 146791-76-8P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation and conversion of, to benzo[thienonaphthoquinoline and benzo[thienonaphthotriazoloquinoline)

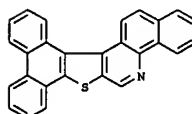
L11 ANSWER 49 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)
 (carbon-13 and proton NMR, and HMQC-TOCSY, and HMBC of)
 RN 147031-40-1 CAPLUS
 CN Phenanthro[9'',10'':4,5]thieno[2,3-c]quinoline (9CI) (CA INDEX NAME)



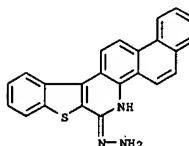
RN 147031-41-2 CAPLUS
 CN Benzo[f]phenanthro[9'',10'':4,5]thieno[2,3-c]quinoline (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

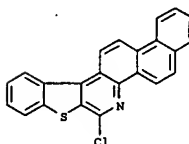
RN 147031-42-3 CAPLUS
 CN Benzo[h]phenanthro[9'',10'':4,5]thieno[2,3-c]quinoline (9CI) (CA INDEX NAME)



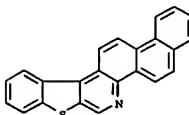
L11 ANSWER 50 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)
 RN 146791-76-6 CAPLUS
 CN [1]Benzo[thieno[2,3-c]naphtho[1,2-h]quinolin-8(7H)-one, hydrazone (9CI) (CA INDEX NAME)



IT 146791-75-5P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
 (preparation and reaction of, with hydrazine)
 RN 146791-75-5 CAPLUS
 CN [1]Benzo[thieno[2,3-c]naphtho[1,2-h]quinoline, 8-chloro- (9CI) (CA INDEX NAME)

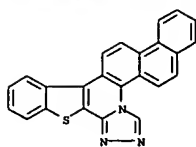


IT 146791-77-7P 146791-78-8P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation of)
 RN 146791-77-7 CAPLUS
 CN [1]Benzo[thieno[2,3-c]naphtho[1,2-h]quinoline (9CI) (CA INDEX NAME)

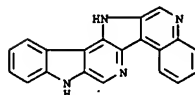


RN 146791-78-8 CAPLUS
 CN [1]Benzo[thieno[2,3-c]naphtho[1,2-h]triazolo[4,3-a]quinoline (9CI) (CA INDEX NAME)

L11 ANSWER 50 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

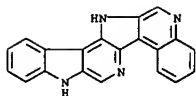


L11 ANSWER 51 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 1993:59604 CAPLUS
 DN 118:59604
 TI Molecular yardsticks. Rigid probes to define the spatial dimensions of the benzodiazepine receptor binding site
 AU Martin, Michael J.; Trudell, Mark L.; Diaz Araujo, Hernando; Allen, Michael S.; Laloggia, Anthony J.; Deng, Li; Schultz, Christopher A.; Tan, Yun Chou; Bi, Yingzhi; et al.
 CS Dep. Chem., Univ. Wisconsin, Madison, WI, 53201, USA
 SO Journal of Medicinal Chemistry (1992), 35(22), 4105-17
 CODEN: JMCHAR; ISSN: 0022-2623
 DT Journal
 LA English
 AB A series of rigid planar azadiindoles, benzannulated pyridodiindoles and indolopyridimidazoles were synthesized from 4-oxo-1,2,3,4-tetrahydro- β -carboline via the Fischer indole cyclization with the appropriate arylhydrazines. These analogs were employed as probes ("molecular yardsticks") to define the spatial dimensions of the lipophilic regions of the benzodiazepine receptor (BzR) binding cleft. Benzannulated indoles and indolopyridimidazoles were important in establishing an area of negative interaction in the binding cleft common to the interactions of both inverse agonists and agonists. Data from this chemical and computer-assisted anal. of the pharmacophore indicates that inverse agonists and agonists bind to the same binding region, but the pharmacophoric descriptors required for the two activities are different, in keeping with previous studies with these planar ligands. However, the hydrogen bond donating site H1 and the lipophilic region L1 in the receptor binding site are common interactions experienced by both series of ligands. The low affinities of both indolo[3,2-c]carbazole and indolo[3,2-b]isoquinoline for the BzR are consonant with the requirements of a hydrogen bond acceptor interaction at donor site H1 and a hydrogen bond donor interaction at acceptor site A2 for potent inverse agonist activity in the β -carboline series.
 IT 128478-63-7P 143858-66-6P
 RL: FRP (Properties); SPN (Synthetic preparation); PREP (Preparation) (preparation and spectra of)
 RN 128478-63-7 CAPLUS
 CN Indolo[3',2'':4',5']pyrido[2',3':4,5]pyrrolo[2,3-c]quinoline, 7,12-dihydro-, (9CI) (CA INDEX NAME)



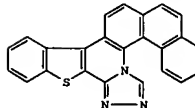
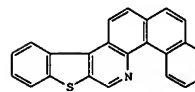
RN 143858-66-6 CAPLUS
 CN Indolo[3',2'':4',5']pyrido[2',3':4,5]pyrrolo[2,3-c]quinoline, 7,12-dihydro-, monohydrochloride (9CI) (CA INDEX NAME)

L11 ANSWER 51 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



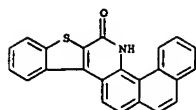
● HCl

L11 ANSWER 52 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 1992:571270 CAPLUS
 DN 117:171270
 TI The synthesis of novel polycyclic heterocyclic ring systems via photocyclization. 7. [1]Benzo[thieno[2,3-c]naphtho[2,1-h]quinoline and [1]benzo[thieno[2,3-c]naphtho[2,1-h][1,2,4]triazolo[4,3-a]quinoline
 AU Sasaki, Kenji; Castle, Raymond N.
 CS Dep. Chem., Univ. South Florida, Tampa, FL, 33620-5250, USA
 SO Journal of Heterocyclic Chemistry (1992), 29(4), 963-5
 CODEN: JHTCAD; ISSN: 0022-152X
 DT Journal
 LA English
 OS CASREACT 117:171270
 GI

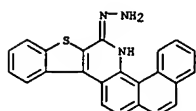


AB The synthesis of two novel polycyclic heterocyclic ring systems via photocyclization is described. These are [1]benzo[thieno[2,3-c]naphtho[2,1-h]quinoline (I) and [1]benzo[thieno[2,3-c]naphtho[2,1-h][1,2,4]triazolo[4,3-a]quinoline (II). In the ¹H NMR spectrum the proton at position 6 is strongly deshielded in the first ring system while the proton at position 6 in the second ring system is shifted considerably upfield while the proton at position 8 in the second ring system is the most deshielded proton in that ring system. The bay regions in both ring systems are severely congested.
 IT 143770-39-2P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent) (preparation and chlorination of)
 RN 143770-39-2 CAPLUS
 CN [1]Benzo[thieno[2,3-c]naphtho[2,1-h]quinolin-8(7H)-one (9CI) (CA INDEX NAME)

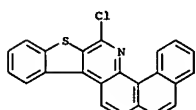
L11 ANSWER 52 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



IT 143770-41-6P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
 (preparation and cyclization of, with orthoformate)
 RN 143770-41-6 CAPLUS
 CN [1]Benzo[thieno[2,3-c]naphtho[2,1-h]quinolin-8(7H)-one, hydrazone (9CI) (CA INDEX NAME)



IT 143770-40-5P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation and reaction of with hydrazine)
 RN 143770-40-5 CAPLUS
 CN [1]Benzo[thieno[2,3-c]naphtho[2,1-h]quinoline, 8-chloro- (9CI) (CA INDEX NAME)



IT 143770-42-7P 143770-43-8P
 RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
 (preparation and spectra of)
 RN 143770-42-7 CAPLUS
 CN [1]Benzo[thieno[2,3-c]naphtho[2,1-h]quinoline (9CI) (CA INDEX NAME)

L11 ANSWER 53 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 1992:523218 CAPLUS
 DN 117:123218

TI Assignment of the proton and carbon-13 NMR spectra of naphtho[1',2':4,5]thieno[2,3-c]quinoline using two-dimensional NMR spectroscopy

AU Castle, Lyle W.; Zektzer, Andrew S.; Johnston, Milton D., Jr.
 CS Dep. Chem., Univ. South Florida, Tampa, FL, 33670, USA
 SO Magnetic Resonance in Chemistry (1992), 30(8), 779-85
 CODEN: MRCHG; ISSN: 0749-1581

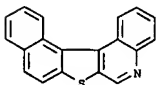
DT Journal
 LA English

AB The ¹H NMR spectrum of naphtho[1',2':4,5]thieno[2,3-c]quinoline is highly congested because all the protons are in an aromatic environment, and the structure of the mol. is nearly sym. With this in mind, the assignment

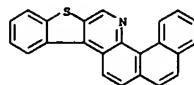
of the ¹H and ¹³C NMR spectra of this compound obtained using 2-dimensional NMR spectroscopy is reported.

IT 95518-78-8, Naphtho[1',2':4,5]thieno[2,3-c]quinoline
 RL: PRP (Properties)
 (NMR of)

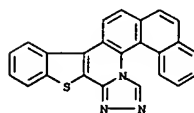
RN 95518-78-8 CAPLUS
 CN Naphtho[1',2':4,5]thieno[2,3-c]quinoline (9CI) (CA INDEX NAME)



L11 ANSWER 52 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



RN 143770-43-8 CAPLUS
 CN [1]Benzo[thieno[2,3-c]naphtho[2,1-h][1,2,4]triazolo[4,3-a]quinoline (9CI) (CA INDEX NAME)



L11 ANSWER 54 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 1992:419029 CAPLUS
 DN 117:19029

TI Inverted and suppressed direct response HMQC-TOCSY spectra. A convenient method of spectral editing

AU Martin, Gary E.; Spitzer, Timothy D.; Crouch, Ronald C.
 CS Div. Org. Chem., Burroughs Wellcome Co., Research Triangle Park, NC, 27709, USA

SO Journal of Heterocyclic Chemistry (1992), 29(2), 577-82
 CODEN: JHTCAD; ISSN: 0022-152X

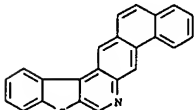
DT Journal
 LA English

AB HMQC-TOCSY (heteronuclear multiple quantum coherence-total correlation spectroscopy) spectra provide a convenient means of establishing proton-proton connectivities in congested spectra of complex aromatic heterocycles. Advantage is taken of the greater dispersion of the ¹³C

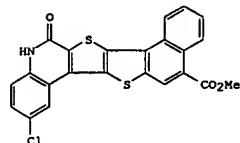
NMR spectrum to circumvent overlap which would preclude spectral interpretation through the usual COSY spectrum. A recently reported method for inverting direct responses (IDR) in HMQC-TOCSY spectra is demonstrated for [1]benzo[thieno[2,3-c]naphtho[2,1-g]quinoline. A modification of the IDR-HMQC-TOCSY method is also demonstrated which is capable of fully suppressing direct responses (SDR) without resorting to the timing of the onset of decoupling as in the original report of the HMQC-TOCSY experiment. SDR-HMQC-TOCSY has the further advantage of allowing the use of higher levels of digitization in F2 that can be attained when broadband heteronuclear decoupling is employed.

IT 142094-01-7
 RL: PRP (Properties)
 (NMR of)

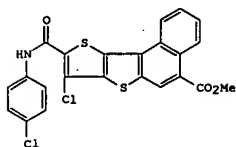
RN 142094-01-7 CAPLUS
 CN [1]Benzo[thieno[2,3-c]naphtho[2,1-g]quinoline (9CI) (CA INDEX NAME)



L11 ANSWER 55 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 1992:214381 CAPLUS
 DN 116:214381
 TI The synthesis of new heteropolycyclic quinolone by twofold photocyclization: methoxycarbonylnaphtho[2',1':2',3'-b]-thieno[4',5':2,3]thieno[5,4-c]quinolin-6(5H)-one
 AU Karminski-Zamola, Grace; Pavlicic, Davorka; Bajic, Miroslav; Blazevic, Nikola
 CS Fac. Technol., Univ. Zagreb, Zagreb, 41000, Yugoslavia
 SO Heterocycles (1991), 32(12), 2323-7
 CODEN: HETCYAM; ISSN: 0385-5414
 DT Journal
 LA English
 OS CASREACT 116:214381
 GI



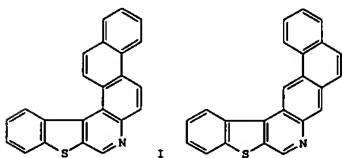
I



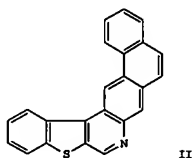
II

AB New heterocyclic ring system, naphthothienothienoquinolinone I is prepared by multistep synthesis introducing two-fold photochem. cyclization. The last step of the synthesis was a photochem. cyclization of (N-p-chlorophenyl)chloronaphthothienothienocarboxamide II.
 IT 140933-94-4P
 RL: SPN (Synthetic preparation); PREP (Preparation) (preparation of)
 RN 140933-94-4 CAPLUS
 CN Naphtho[1'',2'':4',5']thieno[2',3':4,5]thieno[2,3-c]quinoline-12-carboxylic acid, 2-chloro-5,6-dihydro-6-oxo-, methyl ester (9CI) (CA INDEX NAME)

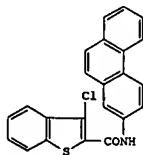
L11 ANSWER 56 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 1992:128712 CAPLUS
 DN 116:128712
 TI The synthesis of novel polycyclic heterocyclic ring systems via photocyclization. 5. [1]Benzothieno[2,3-c]naphtho[2,1-f]quinoline and [1]benzothieno[2,3-c]naphtho[1,2-g]quinoline
 AU Luo, Jiann Kuan; Castle, Raymond N.
 CS Dep. Chem., Univ. South Florida, Tampa, FL, 33620-5250, USA
 SO Journal of Heterocyclic Chemistry (1991), 28(8), 1825-30
 CODEN: JHETCAD; ISSN: 0022-152X
 DT Journal
 LA English
 GI



I



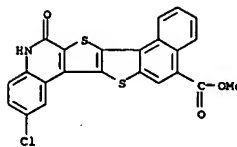
II



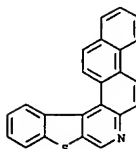
III

AB The title heterocycles (I and II, resp.) were prepared by photocyclization of amide III, followed by chlorination (POCl₃) and reductive dechlorination (H₂, Pd/C). ¹H and ¹³C NMR spectra were assigned by 2D methods.
 IT 139334-20-6P 139334-21-7P
 RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation) (preparation and NMR of)
 RN 139334-20-6 CAPLUS
 CN [1]Benzothieno[2,3-c]naphtho[2,1-f]quinoline (9CI) (CA INDEX NAME)

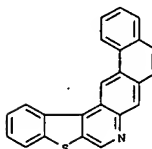
L11 ANSWER 55 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



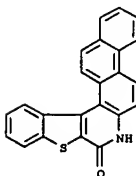
L11 ANSWER 56 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



RN 139334-21-7 CAPLUS
 CN [1]Benzothieno[2,3-c]naphtho[1,2-g]quinoline (9CI) (CA INDEX NAME)

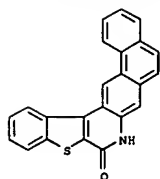


IT 139334-22-8P 139334-23-9P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent) (preparation and chlorination of)
 RN 139334-22-8 CAPLUS
 CN [1]Benzothieno[2,3-c]naphtho[2,1-f]quinolin-8(7H)-one (9CI) (CA INDEX NAME)

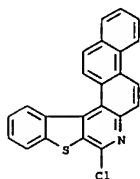


RN 139334-23-9 CAPLUS
 CN [1]Benzothieno[2,3-c]naphtho[1,2-g]quinolin-9(8H)-one (9CI) (CA INDEX NAME)

L11 ANSWER 56 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

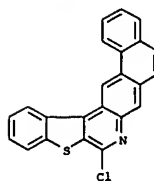


IT 139334-24-0P 139334-25-1P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
 (Reactant or reagent)
 (preparation and reductive dechlorination of)
 RN 139334-24-0 CAPLUS
 CN [1]Benzo[thieno[2,3-c]naphtho[2,1-f]quinoline, 8-chloro- (9CI) (CA INDEX
 NAME)



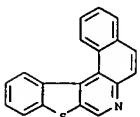
RN 139334-25-1 CAPLUS
 CN [1]Benzo[thieno[2,3-c]naphtho[1,2-g]quinoline, 9-chloro- (9CI) (CA INDEX
 NAME)

L11 ANSWER 56 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



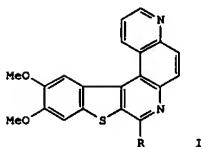
L11 ANSWER 57 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN

AN 1992:83114 CAPLUS
 DN 116:83114
 TI Total assignment of the proton and carbon-13 NMR spectra of
 benzo[f][1]benzothieno[2,3-c]quinoline by inverse-detected
 two-dimensional
 NMR techniques
 AU Shockcor, John P.; Crouch, Ronald C.; Martin, Gary E.; Cherif, Abdallah;
 Luo, Jiann Kuan; Castle, Raymond N.
 CS Div. Pharmacokinetic Drug Metab., Wellcome Res. Lab., Research Triangle
 Park, NC, 27709, USA
 SO Journal of Heterocyclic Chemistry (1991), 28(8), 2035-9
 CODEN: JHTCAD; ISSN: 0022-152X
 DT Journal
 LA English
 AB The proton and carbon NMR spectra of benzo[f][1]benzothieno[2,3-
 c]quinoline have been totally assigned using a combination of 2D NMR
 methods including concerted use of HMQC (heteronuclear multiple quantum
 correlation) and HMBC (heteronuclear multiple bond correlation) expts.
 IT 128252-35-7, Benzo[f][1]benzothieno[2,3-c]quinoline
 RL: PRP (Properties)
 (proton and carbon-13 NMR of)
 RN 128252-35-7 CAPLUS
 CN Benzo[f][1]benzothieno[2,3-c]quinoline (9CI) (CA INDEX NAME)



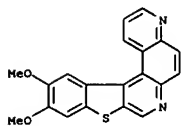
L11 ANSWER 58 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN

AN 1992:20966 CAPLUS
 DN 116:20966
 TI Complete assignment of the proton and carbon-13 NMR spectra of
 11,12-dimethoxy[1]benzothieno[3,2-a]-4,7-phenanthroline and its 8-chloro
 analog. Concerted use of two-dimensional NMR techniques
 AU Musmar, M. J.; Castle, Raymond N.
 CS Dep. Chem., Univ. South Florida, Tampa, FL, 33620-5250, USA
 SO Journal of Heterocyclic Chemistry (1991), 28(6), 1533-6
 CODEN: JHTCAD; ISSN: 0022-152X
 DT Journal
 LA English
 GI

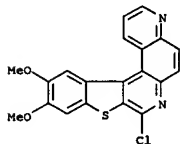


AB The 1H- and 13C-NMR spectra of 11,12-dimethoxy[1]benzothieno[3,2-a]-4,7-
 phenanthroline (I; R = H) and its 8-chloro precursor (I; R = Cl) were
 totally assigned using a combination of two-dimensional NMR techniques.
 After correlation of the majority of the proton signals by a COSY
 spectrum
 and one-bond heteronuclear correlation, the full assignment of the 1H-
 and
 13C-NMR spectra of the novel heterocyclic compds. required the
 application
 of long-range CH coupling information particularly for quaternary carbon
 resonance assignment and the orientation of individual spin systems
 relative to one another. Key long-range heteronuclear couplings in both
 compds. served to confirm the one-bond heteronuclear correlations.
 Unequivocal interpretation of the spectral data leads to the complete
 assignments of the resonances.
 IT 137807-20-6 137807-21-7
 RL: PROC (Process)
 (proton and carbon-13 NMR of)
 RN 137807-20-6 CAPLUS
 CN [1]Benzo[thieno[3,2-a]-4,7-phenanthroline, 11,12-dimethoxy- (9CI) (CA
 INDEX NAME)

L11 ANSWER 58 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



RN 137807-21-7 CAPLUS
 CN [1]Benzo[thieno[3,2-a]-4,7-phenanthroline, 8-chloro-11,12-dimethoxy- (9CI)
 (CA INDEX NAME)



L11 ANSWER 59 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN

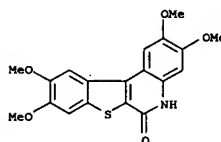
AN 1991:656039 CAPLUS
 DN 115:256039
 TI The synthesis of substituted [1]benzo[thieno[2,3-c]quinolines and their
 N-methyl quaternary salts
 AU Luo, Jian Kuan; Musmar, M. J.; Castle, Raymond N.
 CS Dep. Chem., Univ. South Florida, Tampa, FL 33620-5250, USA
 SO Journal of Heterocyclic Chemistry (1991), 28(5), 1309-13
 CODEN: JHCTAD; ISSN: 0022-152X
 DT Journal
 LA English
 GI

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB Four substituted benzo[thienoquinolines I (R, R1 = OMe; RR1 = OCH2O; R2 =
 H, F; R3 = H, OMe) were prepared by photocyclization of the appropriate
 carboxamides II to the corresponding benzo[thienoquinolinones III followed
 by chlorination and dechlorination resulting in the title compds.
 Treatment of I with iodomethane furnished the corresponding N-Me
 quaternary salts.

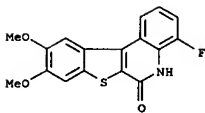
IT 137278-51-4P 137278-52-5P 137278-53-6P
 137278-54-7P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
 (Reactant or reagent)
 (preparation and chlorination of)

RN 137278-51-4 CAPLUS
 CN [1]Benzo[thieno[2,3-c]quinolin-6(5H)-one, 2,3,9,10-tetramethoxy- (9CI)
 (CA INDEX NAME)

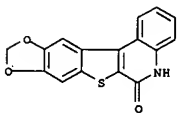


RN 137278-52-5 CAPLUS
 CN [1]Benzo[thieno[2,3-c]quinolin-6(5H)-one, 4-fluoro-9,10-dimethoxy- (9CI)
 (CA INDEX NAME)

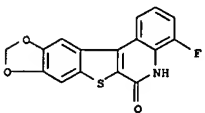
L11 ANSWER 59 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



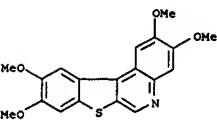
RN 137278-53-6 CAPLUS
 CN [1,3]Dioxolo[5,6][1]benzo[thieno[2,3-c]quinolin-6(5H)-one (9CI) (CA INDEX
 NAME)



RN 137278-54-7 CAPLUS
 CN [1,3]Dioxolo[5,6][1]benzo[thieno[2,3-c]quinolin-6(5H)-one, 4-fluoro- (9CI)
 (CA INDEX NAME)

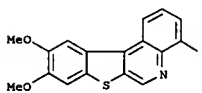


IT 137278-59-2P 137278-60-5P 137278-61-6P
 137278-62-7P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
 (Reactant or reagent)
 (preparation and quaternization of)
 RN 137278-59-2 CAPLUS
 CN [1]Benzo[thieno[2,3-c]quinoline, 2,3,9,10-tetramethoxy- (9CI) (CA INDEX
 NAME)

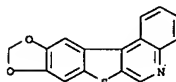


L11 ANSWER 59 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

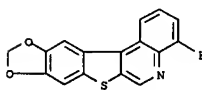
RN 137278-60-5 CAPLUS
 CN [1]Benzo[thieno[2,3-c]quinoline, 4-fluoro-9,10-dimethoxy- (9CI) (CA INDEX
 NAME)



RN 137278-61-6 CAPLUS
 CN [1,3]Dioxolo[5,6][1]benzo[thieno[2,3-c]quinoline (9CI) (CA INDEX NAME)

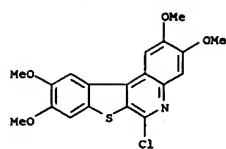


RN 137278-62-7 CAPLUS
 CN [1,3]Dioxolo[5,6][1]benzo[thieno[2,3-c]quinoline, 4-fluoro- (9CI) (CA
 INDEX NAME)

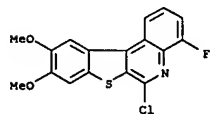


IT 137278-55-8P 137278-56-9P 137278-57-0P
 137278-58-1P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
 (Reactant or reagent)
 (preparation and reductive dechlorination of)
 RN 137278-55-8 CAPLUS
 CN [1]Benzo[thieno[2,3-c]quinoline, 6-chloro-2,3,9,10-tetramethoxy- (9CI)
 (CA INDEX NAME)

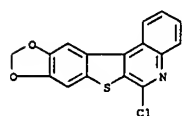
L11 ANSWER 59 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



RN 137278-56-9 CAPLUS
CN [1]Benzothieno[2,3-c]quinoline, 6-chloro-4-fluoro-9,10-dimethoxy- (9CI)
(CA INDEX NAME)

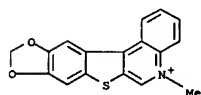


RN 137278-57-0 CAPLUS
CN [1,3]Dioxolo[5,6-b]benzothieno[2,3-c]quinoline, 6-chloro- (9CI) (CA INDEX NAME)

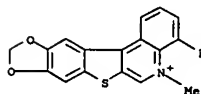


RN 137278-58-1 CAPLUS
CN [1,3]Dioxolo[5,6-b]benzothieno[2,3-c]quinoline, 6-chloro-4-fluoro- (9CI)
(CA INDEX NAME)

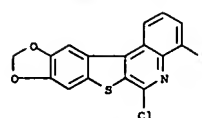
L11 ANSWER 59 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

● I⁻

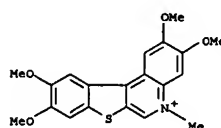
RN 137278-66-1 CAPLUS
CN [1,3]Dioxolo[5,6-b]benzothieno[2,3-c]quinolinium, 4-fluoro-5-methyl-,
iodide (9CI) (CA INDEX NAME)

● I⁻

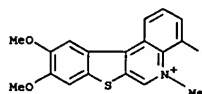
L11 ANSWER 59 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



IT 137278-63-8P 137278-64-9P 137278-65-0P
137278-66-1P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)
RN 137278-63-8 CAPLUS
CN [1]Benzothieno[2,3-c]quinolinium, 2,3,9,10-tetramethoxy-5-methyl-, iodide
(9CI) (CA INDEX NAME)

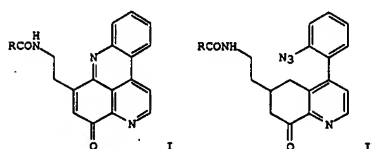
● I⁻

RN 137278-64-9 CAPLUS
CN [1]Benzothieno[2,3-c]quinolinium, 4-fluoro-9,10-dimethoxy-5-methyl-,
iodide (9CI) (CA INDEX NAME)

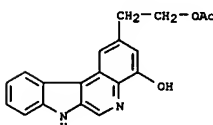
● I⁻

RN 137278-65-0 CAPLUS
CN [1,3]Dioxolo[5,6-b]benzothieno[2,3-c]quinolinium, 5-methyl-, iodide
(9CI)

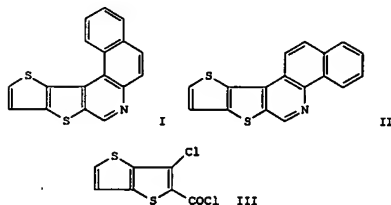
L11 ANSWER 60 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN
AN 1991:608302 CAPLUS
DN 115:208302
TI The total synthesis of cystodytins
AU Ciufolini, Marco A.; Byrne, Norman E.
CS Dep. Chem., Rice Univ., Houston, TX, 77251, USA
SO Journal of the American Chemical Society (1991), 113(21),
8016-24
CODEN: JACSAT; ISSN: 0002-7863
DT Journal
LA English
OS CASREACT 115:208302
GI



AB The first chemical preparation of the cystodytins I (R = Me2C:CH, MeCH:CH) was accomplished. A modified Knoevenagel-Stobbe pyridine formation and a photochem. nitrene insertion into a C-H bond in (azidophenyl)quinolines
II constitute the key phases of this efficient total synthesis.
IT 128350-22-1P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)
RN 128350-22-1 CAPLUS
CN 7H-Indolo[2,3-c]quinoline-2-ethanol, 4-hydroxy-, α-acetate (9CI)
(CA INDEX NAME)

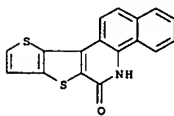


L11 ANSWER 61 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 1991:471431 CAPLUS
 DN 115:71431
 TI The synthesis of novel polycyclic heterocyclic ring systems via photocyclization. 4. Benzo[f]thieno[2',3':4,5]thieno[2,3-c]quinoline and benzo[h]thieno[2',3':4,5]thieno[2,3-c]quinoline and the total assignment of their proton and carbon-13 NMR spectra
 AU Luo, Jiann Kuan; Zektzer, Andrew S.; Castle, Raymond N.
 CS Dep. Chem., Univ. South Florida, Tampa, FL, 33620-5250, USA
 SO Journal of Heterocyclic Chemistry (1991), 28(3), 737-43
 CODEN: JHTCAD; ISSN: 0022-152X
 DT Journal
 LA English
 OS CASREACT 115:71431
 GI

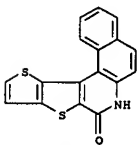


AB The synthesis of two novel benzothienothienoquinoline ring systems I and II from thienothiophene III and α - or β -naphthylamine, resp., via photocyclization of the corresponding naphthylamide derivs. of III are reported. The total assignment of their 1H- and 13C-NMR spectra was determined by utilizing two-dimensional NMR spectroscopic methods.
 IT 135104-30-2P
 RL: SPN (Synthetic preparation); PREP (Preparation) (attempted preparation of)
 RN 135104-30-2 CAPLUS
 CN Benzo[g]thieno[2',3':4,5]thieno[2,3-c]quinolin-5(6H)-one (9CI) (CA INDEX NAME)

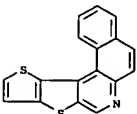
L11 ANSWER 61 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



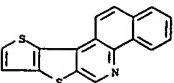
RN 135104-27-7 CAPLUS
 CN Benzo[f]thieno[2',3':4,5]thieno[2,3-c]quinolin-8(7H)-one (9CI) (CA INDEX NAME)



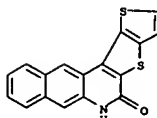
IT 135104-29-9P 135131-09-8P
 RL: SPN (Synthetic preparation); PREP (Preparation) (preparation of)
 RN 135104-29-9 CAPLUS
 CN Benzo[f]thieno[2',3':4,5]thieno[2,3-c]quinoline (9CI) (CA INDEX NAME)



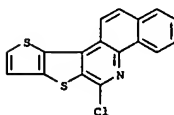
RN 135131-09-8 CAPLUS
 CN Benzo[h]thieno[2',3':4,5]thieno[2,3-c]quinoline (9CI) (CA INDEX NAME)



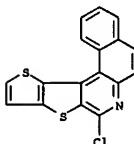
L11 ANSWER 61 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



IT 135104-25-5P 135104-28-8P
 RL: SPN (Synthetic preparation); PREP (Preparation) (preparation and catalytic hydrogenolysis/dechlorination of)
 RN 135104-25-5 CAPLUS
 CN Benzo[h]thieno[2',3':4,5]thieno[2,3-c]quinoline, 6-chloro- (9CI) (CA INDEX NAME)



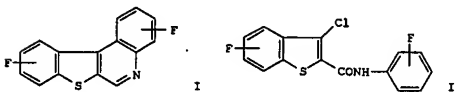
RN 135104-28-8 CAPLUS
 CN Benzo[h]thieno[2',3':4,5]thieno[2,3-c]quinoline, 8-chloro- (9CI) (CA INDEX NAME)



IT 135104-24-4P 135104-27-7P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent) (preparation and chlorination of)
 RN 135104-24-4 CAPLUS
 CN Benzo[h]thieno[2',3':4,5]thieno[2,3-c]quinolin-6(5H)-one (9CI) (CA INDEX NAME)

L11 ANSWER 62 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN

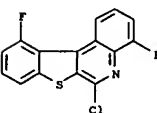
AN 1991:228785 CAPLUS
 DN 114:228785
 TI The synthesis of difluoro[1]benzothieno[2,3-c]quinolines and their N-methyl quaternary salts
 AU Luo, Jiann Kuan; Castle, Steven L.; Castle, Raymond N.
 CS Dep. Chem., Univ. South Florida, Tampa, FL, 33620, USA
 SO Journal of Heterocyclic Chemistry (1990), 27(7), 2047-52
 CODEN: JHTCAD; ISSN: 0022-152X
 DT Journal
 LA English
 OS CASREACT 114:228785
 GI



AB A series of difluoro[1]benzothieno[2,3-c]quinolines I were prepared by photocyclization of the appropriate carboxamides II. The lactams obtained

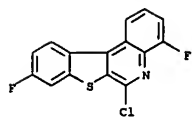
were converted into the corresponding chloro derivs. which were catalytically dechlorinated into I. I were transformed into the N-Me quaternary salts.

IT 133902-28-0P 133902-29-1P 133902-30-4P
 133902-31-5P 133902-32-6P 133902-33-7P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent) (preparation and catalytic dechlorination of)
 RN 133902-28-0 CAPLUS
 CN [1]Benzothieno[2,3-c]quinoline, 6-chloro-4,11-difluoro- (9CI) (CA INDEX NAME)



RN 133902-29-1 CAPLUS
 CN [1]Benzothieno[2,3-c]quinoline, 6-chloro-4,9-difluoro- (9CI) (CA INDEX NAME)

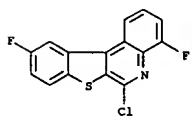
L11 ANSWER 62 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



RN 133902-30-4 CAPLUS
CN [1]Benzo[thieno[2,3-c]quinoline, 6-chloro-2,10-difluoro- (9CI) (CA INDEX NAME)

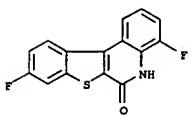


RN 133902-31-5 CAPLUS
CN [1]Benzo[thieno[2,3-c]quinoline, 6-chloro-4,10-difluoro- (9CI) (CA INDEX NAME)

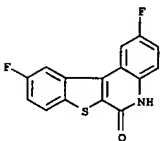


RN 133902-32-6 CAPLUS
CN [1]Benzo[thieno[2,3-c]quinoline, 6-chloro-2,11-difluoro- (9CI) (CA INDEX NAME)

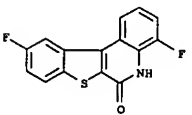
L11 ANSWER 62 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



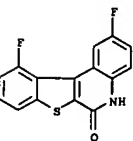
RN 133902-24-6 CAPLUS
CN [1]Benzo[thieno[2,3-c]quinolin-6(5H)-one, 2,10-difluoro- (9CI) (CA INDEX NAME)



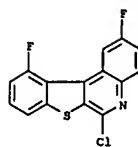
RN 133902-25-7 CAPLUS
CN [1]Benzo[thieno[2,3-c]quinolin-6(5H)-one, 4,10-difluoro- (9CI) (CA INDEX NAME)



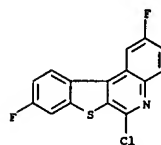
RN 133902-26-8 CAPLUS
CN [1]Benzo[thieno[2,3-c]quinolin-6(5H)-one, 2,11-difluoro- (9CI) (CA INDEX NAME)



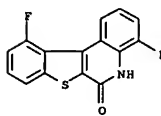
L11 ANSWER 62 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



RN 133902-33-7 CAPLUS
CN [1]Benzo[thieno[2,3-c]quinoline, 6-chloro-2,9-difluoro- (9CI) (CA INDEX NAME)



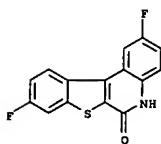
IT 133902-22-4P 133902-23-5P 133902-24-6P
133902-25-7P 133902-26-8P 133902-27-9P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and chlorination of)
RN 133902-22-4 CAPLUS
CN [1]Benzo[thieno[2,3-c]quinolin-6(5H)-one, 4,11-difluoro- (9CI) (CA INDEX NAME)



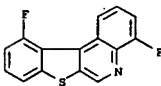
RN 133902-23-5 CAPLUS
CN [1]Benzo[thieno[2,3-c]quinolin-6(5H)-one, 4,9-difluoro- (9CI) (CA INDEX NAME)

L11 ANSWER 62 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

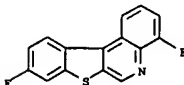
RN 133902-27-9 CAPLUS
CN [1]Benzo[thieno[2,3-c]quinolin-6(5H)-one, 2,9-difluoro- (9CI) (CA INDEX NAME)



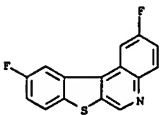
IT 133902-34-8P 133902-35-9P 133902-36-0P
133902-37-1P 133902-38-2P 133929-62-1P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and methylation of)
RN 133902-34-8 CAPLUS
CN [1]Benzo[thieno[2,3-c]quinoline, 4,11-difluoro- (9CI) (CA INDEX NAME)



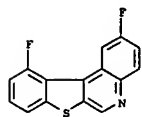
RN 133902-35-9 CAPLUS
CN [1]Benzo[thieno[2,3-c]quinoline, 4,9-difluoro- (9CI) (CA INDEX NAME)



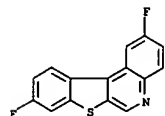
RN 133902-36-0 CAPLUS
CN [1]Benzo[thieno[2,3-c]quinoline, 2,10-difluoro- (9CI) (CA INDEX NAME)



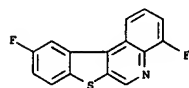
L11 ANSWER 62 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)
 RN 133902-37-1 CAPLUS
 CN [1]Benzo[thieno[2,3-c]quinoline, 2,11-difluoro- (9CI) (CA INDEX NAME)



RN 133902-38-2 CAPLUS
 CN [1]Benzo[thieno[2,3-c]quinoline, 2,9-difluoro- (9CI) (CA INDEX NAME)

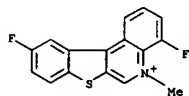


RN 133929-62-1 CAPLUS
 CN [1]Benzo[thieno[2,3-c]quinoline, 4,10-difluoro- (9CI) (CA INDEX NAME)



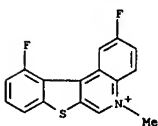
IT 133902-39-3P 133902-40-6P 133902-41-7P
 133902-42-8P 133902-43-9P 134460-52-9P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation of)
 RN 133902-39-3 CAPLUS
 CN [1]Benzo[thieno[2,3-c]quinolinium, 4,11-difluoro-5-methyl-, iodide (9CI)
 (CA INDEX NAME)

L11 ANSWER 62 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



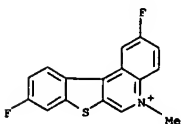
• I⁻

RN 133902-43-9 CAPLUS
 CN [1]Benzo[thieno[2,3-c]quinolinium, 2,11-difluoro-5-methyl-, iodide (9CI)
 (CA INDEX NAME)



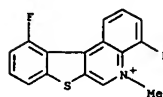
• I⁻

RN 134460-52-9 CAPLUS
 CN [1]Benzo[thieno[2,3-c]quinolinium, 2,9-difluoro-5-methyl-, iodide (9CI)
 (CA INDEX NAME)



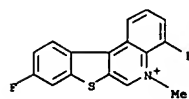
• I⁻

L11 ANSWER 62 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



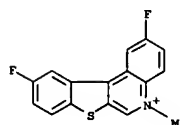
• I⁻

RN 133902-40-6 CAPLUS
 CN [1]Benzo[thieno[2,3-c]quinolinium, 4,9-difluoro-5-methyl-, iodide (9CI)
 (CA INDEX NAME)



• I⁻

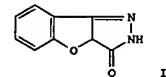
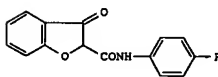
RN 133902-41-7 CAPLUS
 CN [1]Benzo[thieno[2,3-c]quinolinium, 2,10-difluoro-5-methyl-, iodide (9CI)
 (CA INDEX NAME)



• I⁻

RN 133902-42-8 CAPLUS
 CN [1]Benzo[thieno[2,3-c]quinolinium, 4,10-difluoro-5-methyl-, iodide (9CI)
 (CA INDEX NAME)

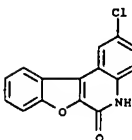
L11 ANSWER 63 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 1991:6361 CAPLUS
 DN 114:6361
 TI Synthesis and reactions of some new benzofurano[3,2-c]pyrazol-3-one and benzofurano[3,2-c]isoxazol-3-one derivatives of expected biological activity
 AU Habib, O. M. O.; Abd El-Rahman, A. H.; Badawy, D. S.
 CS Fac. Sci., Mansoura Univ., Mansoura, Egypt
 SO Revue Roumaine de Chimie (1989), 34(9-10), 1949-55
 CODEN: RRCHAX; ISSN: 0035-3930
 DT Journal
 LA English
 OS CASREACT 114:6361
 GI



AB Me salicylate condensed with α -chloroacetanilides I (R = H, Cl, OMe). Treatment of I with $\text{NH}_4\text{H}_2\text{O}$, PhNH_2 , HONH_2HCl , polyphosphoric acid, and Mannich bases was studied. Reaction of the pyrazolone derivative II with ClCH_2COCl , PhN_2^+ and Mannich bases was also investigated.

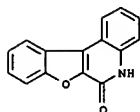
IT 57046-67-0P 128433-20-5P, Benzofuro[2,3-c]quinolin-6(5H)-one 130968-23-9P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation of)

RN 57046-67-0 CAPLUS
 CN Benzofuro[2,3-c]quinolin-6(5H)-one, 2-chloro- (9CI) (CA INDEX NAME)

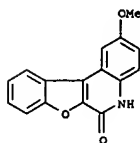


RN 128433-20-5 CAPLUS
 CN Benzofuro[2,3-c]quinolin-6(5H)-one (9CI) (CA INDEX NAME)

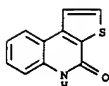
L11 ANSWER 63 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



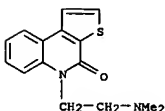
RN 130968-23-9 CAPLUS
 CN Benzo[2,3-c]quinolin-6(5H)-one, 2-methoxy- (9CI) (CA INDEX NAME)



L11 ANSWER 64 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

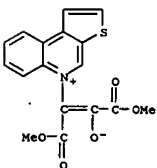


IT 130747-14-7P 130747-17-0P 130747-19-2P
 130747-20-5P 130747-21-6P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation of)
 RN 130747-14-7 CAPLUS
 CN Thieno[2,3-c]quinolin-4(5H)-one, 5-[2-(dimethylamino)ethyl]-,
 monohydrochloride (9CI) (CA INDEX NAME)



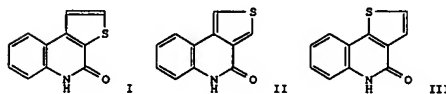
● HCl

RN 130747-17-0 CAPLUS
 CN Thieno[2,3-c]quinolinium,
 5-[2-hydroxy-1-(methoxycarbonyl)-3-methoxy-3-oxo-
 1-propenyl]-, inner salt (9CI) (CA INDEX NAME)



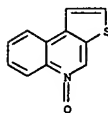
RN 130747-19-2 CAPLUS
 CN 4,4'-Bithieno[2,3-c]quinoline, 5-oxide (9CI) (CA INDEX NAME)

L11 ANSWER 64 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 1990:631242 CAPLUS
 DN 113:231242
 TI Some reactions of thieno-fused quinoline N-oxides
 AU Gronowitz, Salo; Timari, Geza
 CS Org. Chem. 1, Chem. Cent., Univ. Lund., Lund, S-221 00, Swed.
 SO Journal of Heterocyclic Chemistry (1990), 27(5), 1501-4
 CODEN: JHTCAD; ISSN: 0022-152X
 DT Journal
 LA English
 OS CASREACT 113:231242
 GI



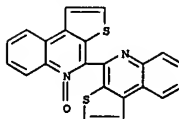
AB Three thieno-fused quinoline N-oxides were converted to the corresponding 4-oxo-4,5-dihydrothienoquinolines I, II and III. I, II, and III were alkylated with dimethylaminoethyl and dimethylaminopropyl chlorides. The reaction of the three thieno-fused quinolines with di-Me acetylenedicarboxylate was studied, as well as their reactions with BuLi and (Me₂CH)₂NLi.

IT 106561-66-4
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (conversion to oxodihydrothienoquinoline derivative and addition
 reaction with
 di-Me acetylenedicarboxylate)
 RN 106561-66-4 CAPLUS
 CN Thieno[2,3-c]quinoline, 5-oxide (9CI) (CA INDEX NAME)

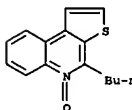


IT 35621-15-9P, Thieno[2,3-c]quinolin-4(5H)-one
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
 (Reactant or reagent)
 (preparation and alkylation of, with (dimethylamino)ethyl chloride)
 RN 35621-15-9 CAPLUS
 CN Thieno[2,3-c]quinolin-4(5H)-one (6CI, 9CI) (CA INDEX NAME)

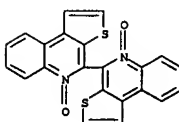
L11 ANSWER 64 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



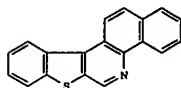
RN 130747-20-5 CAPLUS
 CN Thieno[2,3-c]quinoline, 4-butyl-, 5-oxide (9CI) (CA INDEX NAME)



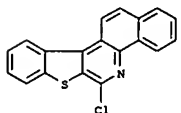
RN 130747-21-6 CAPLUS
 CN 4,4'-Bithieno[2,3-c]quinoline, 5,5'-dioxide (9CI) (CA INDEX NAME)



L11 ANSWER 65 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 1990:611872 CAPLUS
 DN 113:211872
 TI The synthesis of novel polycyclic heterocyclic ring systems via photocyclization. 2. Benzo[h][1]benzothieno[2,3-c]quinoline and benzo[f][1]benzothieno[2,3-c]quinoline
 AU Luo, Jiann Kuan; Castle, Raymond N.
 CS Dep. Chem., Univ. South Florida, Tampa, FL, 33620, USA
 SO Journal of Heterocyclic Chemistry (1990), 27(4), 1031-3
 CODEN: JHTCAD; ISSN: 0022-152X
 DT Journal
 LA English
 GI

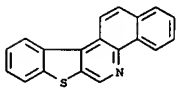


AB The synthesis of the two title unsubstituted polycyclic heterocyclic benzothienoquinolines, e.g. I, by photocyclization of the appropriate amides is reported.
 IT 130251-05-7P 130462-69-0P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
 (preparation and catalytic dechlorination of)
 RN 130251-05-7 CAPLUS
 CN Benzo[h][1]benzothieno[2,3-c]quinoline, 6-chloro- (9CI) (CA INDEX NAME)

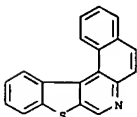


RN 130462-69-0 CAPLUS
 CN Benzo[f][1]benzothieno[2,3-c]quinoline, 8-chloro- (9CI) (CA INDEX NAME)

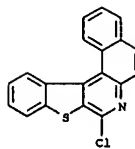
L11 ANSWER 65 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



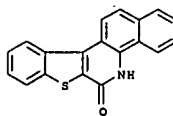
RN 128252-35-7 CAPLUS
 CN Benzo[f][1]benzothieno[2,3-c]quinoline (9CI) (CA INDEX NAME)



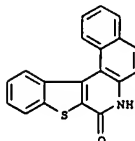
L11 ANSWER 65 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



IT 65469-37-6P 130231-76-4P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
 (preparation and chlorination of)
 RN 65469-37-6 CAPLUS
 CN Benzo[h][1]benzothieno[2,3-c]quinolin-6(5H)-one (9CI) (CA INDEX NAME)

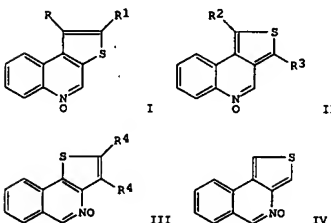


RN 130231-76-4 CAPLUS
 CN Benzo[f][1]benzothieno[2,3-c]quinolin-8(7H)-one (9CI) (CA INDEX NAME)



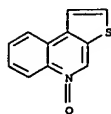
IT 65682-51-1P, Benzo[h][1]benzothieno[2,3-c]quinoline
 128252-35-7P, Benzo[f][1]benzothieno[2,3-c]quinoline
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation of)
 RN 65682-51-1 CAPLUS
 CN Benzo[h][1]benzothieno[2,3-c]quinoline (9CI) (CA INDEX NAME)

L11 ANSWER 66 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 1990:591206 CAPLUS
 DN 113:191206
 TI On the bromination of the six thieno analogs of phenanthridine N-oxide
 AU Gronowitz, Salo; Timari, Geza
 CS Chem. Cent., Univ. Lund, Lund, S-221 00, Swed.
 SO Chemica Scripta (1989), 29(4), 309-11
 CODEN: CSRPB9; ISSN: 0004-2056
 DT Journal
 LA English
 OS CASREACT 113:191206
 GI

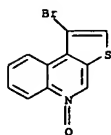


AB The bromination of 6 thienoisquinoline and thienoisquinoline oxides was studied. Thus, treatment of thieno[2,3-c]quinoline oxide I (R = R1 = H) with Br2 in H2SO4-Ag2SO4 gave 66% I (R = Br, R1 = H) and 16% I (R = R1 = Br). Bromination of thieno[3,4-c]quinoline oxide II (R2 = R3 = H) in a buffered system (Na2CO3, MgSO4, K2HPO4) in CHCl3 gave 43% II (R2 = H, R3 = Br) or 52% II (R2 = R3 = Br) depending on the amt of Br2 used. Up to 60% dibromothienoisquinoline III (R4 = Br) was obtained on treating III (R4 = H) with Br2-H2SO4-Ag2SO4. Attempted bromination of thieno[3,4-c]isquinoline IV under both conditions gave only decomposition products.
 IT 104561-66-4
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (bromination of)
 RN 104561-66-4 CAPLUS
 CN Thieno[2,3-c]quinoline, 5-oxide (9CI) (CA INDEX NAME)

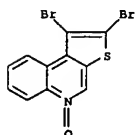
L11 ANSWER 66 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



IT 130081-45-7P 130081-46-8P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation of)
 RN 130081-45-7 CAPLUS
 CN Thieno[2,3-c]quinoline, 1-bromo-, 5-oxide (9CI) (CA INDEX NAME)

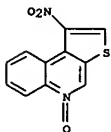


RN 130081-46-8 CAPLUS
 CN Thieno[2,3-c]quinoline, 2,3-dibromo-, 5-oxide (9CI) (CA INDEX NAME)

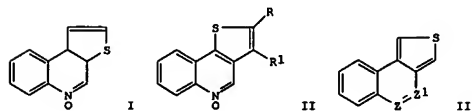


L11 ANSWER 67 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

IT 130081-52-6P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation of)
 RN 130081-52-6 CAPLUS
 CN Thieno[2,3-c]quinoline, 1-nitro-, 5-oxide (9CI) (CA INDEX NAME)



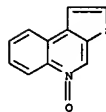
L11 ANSWER 67 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 1990:591205 CAPLUS
 DN 113:191205
 TI On the nitration of the six isomeric thieno-fused analogs of phenanthridine N-oxide
 AU Gronowitz, S.; Timari, G.
 CS Chem. Cent., Univ. Lund, Lund, S-221 00, Swed.
 SO Chemica Scripta (1989), 29(4), 305-8
 CODEN: CSRPB9; ISSN: 0004-2056
 DT Journal
 LA English
 OS CASREACT 113:191205
 GI



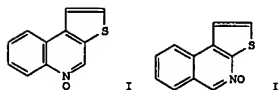
AB Nitration of thieno[2,3-c]quinoline oxide I with fuming nitric acid in concentrated sulfuric acid occurs in the 1-(β)-position while thieno[3,2-c]quinoline oxides, e.g., II (R = R1 = H), gave a mixture of the 2- and 3-nitro deriva., e.g. II (R = NO2, R1 = H; R = H, R1 = NO2). On the other hand, [b]-fused thienoisquinoline oxides gave only the α-nitro isomers. Nitration of the more reactive [c]-fused systems had to be carried out with 70% nitric acid in concentrated sulfuric acid at

0° and gave the 1-nitro isomers with both thieno[3,4-c]quinoline and -isoquinoline oxides II (Z = NO, Z1 = CH; Z = CH, Z1 = NO). Structures were determined from 1H and proton coupled 13C-NMR spectra. Nitration most probably occurs on the protonated form.

IT 106561-66-4
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (nitration of)
 RN 106561-66-4 CAPLUS
 CN Thieno[2,3-c]quinoline, 5-oxide (9CI) (CA INDEX NAME)

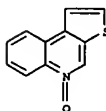


L11 ANSWER 68 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 1990:590545 CAPLUS
 DN 113:190545
 TI Regioselectivity of nitration of thieno-fused quinoline and isoquinoline derivatives
 AU Szabo, K. J.; Timari, G.; Gronowitz, S.
 CS Chem. Cent., Univ. Lund, Lund, S-221 00, Swed.
 SO Chemica Scripta (1989), 29(4), 313-14
 CODEN: CSRPB9; ISSN: 0004-2056
 DT Journal
 LA English
 GI



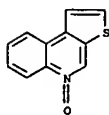
AB Gradient-optimized structures, atomic charges and energies were computed for sigma complexes occurring in nitration reactions of thieno[2,3-c]quinoline oxide I and thieno[2,3-c]isoquinoline oxide II. The anal. of the electronic structure of the complexes revealed that the difference in the site preference on the thiophene ring of these ring systems is the result of distinct electronic effects.

IT 130075-73-9
 RL: PRP (Properties)
 (MO, mol. structure, electron configuration, and total energy of, regiochem. of nitration in relation to)
 RN 130075-73-9 CAPLUS
 CN Thieno[2,3-c]quinoline, 5-oxide, conjugate monoacid (9CI) (CA INDEX NAME)

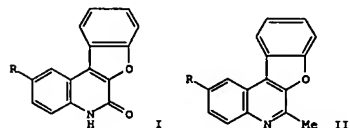
● H⁺

IT 106561-66-4
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (nitration of, regiochem. of, MNDO calcs. in relation to)
 RN 106561-66-4 CAPLUS
 CN Thieno[2,3-c]quinoline, 5-oxide (9CI) (CA INDEX NAME)

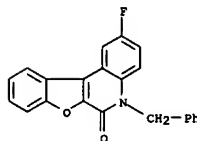
L11 ANSWER 68 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



L11 ANSWER 69 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 1990:552301 CAPLUS
 DN 113:152301
 TI The synthesis of benzofuroquinolines. VIII. Some halobenzofuro[2,3-c]quinoline derivatives
 AU Yamaguchi, Seiji; Yokoi, Takashi; Yamada, Minoru; Arai, Hitomi; Uchiuzo, Yasuto; Kawase, Yoshiyuki
 CS Fac. Sci., Toyama Univ., Toyama, 930, Japan
 SO Journal of Heterocyclic Chemistry (1990), 27(4), 1003-5
 CODEN: JHTCAD; ISSN: 0022-152X
 DT Journal
 LA English
 OS CASREACT 113:152301
 GI

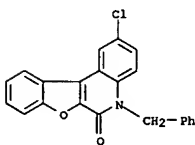


AB Halobenzofuro[2,3-c]quinolinones I (R = F, Cl, Br) were synthesized by photocyclization of N-benzyl-N-(p-halophenyl)-2-benzofurancarboxamides or by condensation of 5,2-R(H2N)C6H3COC6H4OH-2 (II) with ClCH2CN. Halomethylbenzofuro[2,3-c]quinolinones III (R = F, Cl, Br) were synthesized by the condensation of II with ClCH2COME.
 IT 129687-86-1P 129687-89-4P 129687-91-8P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
 RN 129687-86-1 CAPLUS
 CN Benzofuro[2,3-c]quinolin-6(5H)-one, 2-fluoro-5-(phenylmethyl)- (9CI) (CA INDEX NAME)

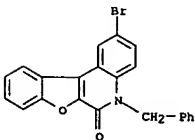


RN 129687-89-4 CAPLUS

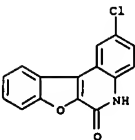
L11 ANSWER 69 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)
 CN Benzofuro[2,3-c]quinolin-6(5H)-one, 2-chloro-5-(phenylmethyl)- (9CI) (CA INDEX NAME)



RN 129687-91-8 CAPLUS
 CN Benzofuro[2,3-c]quinolin-6(5H)-one, 2-bromo-5-(phenylmethyl)- (9CI) (CA INDEX NAME)

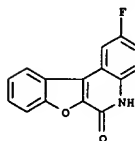


IT 57046-67-0P 129687-79-2P 129687-80-5P
 129687-81-6P 129687-82-7P 129687-83-8P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation of)
 RN 57046-67-0 CAPLUS
 CN Benzofuro[2,3-c]quinolin-6(5H)-one, 2-chloro- (9CI) (CA INDEX NAME)

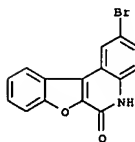


RN 129687-79-2 CAPLUS
 CN Benzofuro[2,3-c]quinolin-6(5H)-one, 2-fluoro- (9CI) (CA INDEX NAME)

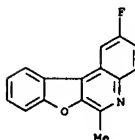
L11 ANSWER 69 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



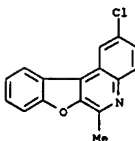
RN 129687-80-5 CAPLUS
 CN Benzofuro[2,3-c]quinolin-6(5H)-one, 2-bromo- (9CI) (CA INDEX NAME)



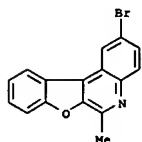
RN 129687-81-6 CAPLUS
 CN Benzofuro[2,3-c]quinoline, 2-fluoro-6-methyl- (9CI) (CA INDEX NAME)



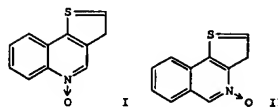
RN 129687-82-7 CAPLUS
 CN Benzofuro[2,3-c]quinoline, 2-chloro-6-methyl- (9CI) (CA INDEX NAME)



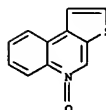
L11 ANSWER 69 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)
 RN 129687-83-8 CAPLUS
 CN Benzofuro[2,3-c]quinoline, 2-bromo-6-methyl- (9CI) (CA INDEX NAME)



L11 ANSWER 70 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 1990:515133 CAPLUS
 DN 113:115133
 TI On the synthesis of thieno[3,2-c]quinoline N-oxide and thieno[3,2-c]isoquinoline N-oxide. The NMR spectra of the six isomeric thieno-fused quinoline and isoquinoline N-oxides
 AU Gronowicz, Salo; Timari, Geza
 CS Org. Chem. 1, Chem. Cent., Univ. Lund, Lund, S-221 00, Swed.
 SO Journal of Heterocyclic Chemistry (1990), 27(4), 1127-9
 CODEN: JHTCAD; ISSN: 0022-152X
 DT Journal
 LA English
 OS CASREACT 113:115133
 GI



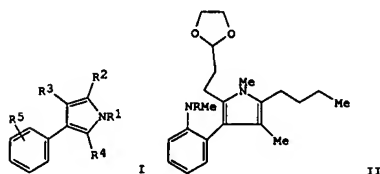
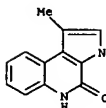
AB The synthesis of the two remaining isomeric monothieno analogs of phenanthridine N-oxide, thieno[3,2-c]quinoline N-oxide and thieno[3,2-c]isoquinoline N-oxide (I and II, resp.) is described. The 1H and 13C NMR spectra of all 6 isomeric thieno-fused quinoline and isoquinoline N-oxides are discussed.
 IT 106561-66-4
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (NMR of proton and carbon-13 in)
 RN 106561-66-4 CAPLUS
 CN Thieno[2,3-c]quinoline, 5-oxide (9CI) (CA INDEX NAME)



L11 ANSWER 71 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 1990:515077 CAPLUS
 DN 113:115077
 TI Preparation of phenylpyrroles as antitumor agents
 IN Thal, Claude; Boye, Olivier; Guenard, Daniel; Potier, Pierre
 PA Centre National de la Recherche Scientifique, Fr.
 SO PCT Int. Appl., 33 pp.
 CODEN: PIXXD2
 DT Patent
 LA French
 FAN.CNT 1

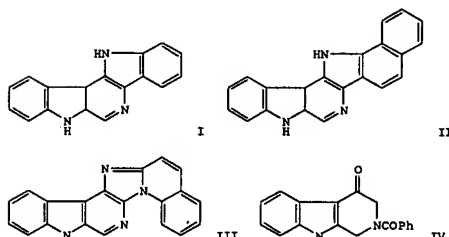
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9002733	A1	19900322	WO 1989-FR442	19890904
W: JP, US				
RW: AT, BE, CH, DE, FR, GB, IT, LU, NL, SE				
FR 2636063	A1	19900309	FR 1988-11592	19880905
FR 2636063	B1	19930430		
EP 432209	A1	19910619	EP 1989-910118	19890904
EP 432209	B1	19940202		
R: AT, BE, CH, DE, FR, GB, IT, LI, LU, NL, SE				
JP 04502146	T2	19920416	JP 1989-509622	19890904
AT 101133	E	19940215	AT 1989-910118	19890904
US 5189055	A	19930223	US 1991-655430	19910401
FR 1988-11592	A	19880905		
EP 1989-910118	A	19890904		
WO 1989-FR442	W	19890904		
CASREACT 113:115077; MARPAT 113:115077				

L11 ANSWER 71 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)
 study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use);
 BIOL (Biological study); PREP (Preparation); USES (Uses)
 (Recept. of, as antitumor agent)
 RN 129044-90-2 CAPLUS
 CN 4H-Pyrrolo[2,3-c]quinolin-4-one, 3,5-dihydro-1-methyl- (9CI) (CA INDEX NAME)



AB The title compds. I (R1-R3 = H, Cl-6 alkyl; R4 = heterocycloalkyl, COY; Y = Cl-4 alkoxy, amino, etc.; R5 = H, NO2, NAlA2; A1, A2 = H, Cl-4 alkyl, etc.) were prepared Hydrogenolysis of phenylpyrrole II (R = PhCH2OCO)
 (III)
 over 10% Pd-C under hydrogen gave II (R = H) (IV). At 100 μ M, III in vitro inhibited the proliferation of KB tumor cells by 59%. At 100 μ M, IV in vitro inhibited the proliferation of KB tumor cells by 100%.
 IT 129044-90-2
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological)

L11 ANSWER 72 OF 162 CAPLUS COPYRIGHT 2005 ACS ON STN
 AN 1990:478197 CAPLUS
 DN 113:78197
 TI Molecular yardsticks: synthesis of higher homologs of 7,12-dihydropyrido[2,4-b:5,4-b']diindole. Probing the dimensions of the benzodiazepine receptor inverse agonist site
 AU Narayanan, Krishnaswamy; Cook, James M.
 CS Dep. Chem., Univ. Wisconsin, Milwaukee, WI, 53201, USA
 SO Heterocycles (1990), 31(2), 203-9
 CODEN: HETCYM; ISSN: 0385-5414
 DT Journal
 LA English
 OS CASREACT 113:78197
 GI

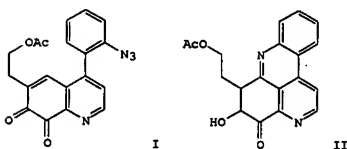


AB The synthesis of higher homologs of 7,12-dihydropyridodiindole I, e.g. diindoles II, and III, via a thermally induced Fischer indole cyclization of benzoyloxotetrahydrocarboline IV with appropriate naphthylhydrazines and quinolyldiazines is described. These pyridodiindoles are to be used

as mol. yardsticks in defining the spatial dimensions of the benzodiazepine receptor inverse agonist site. Benzodiazepine receptor affinities of these compds. are reported.

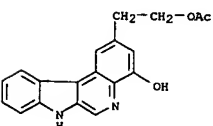
IT 128478-63-7P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation and benzodiazepine receptor binding affinity of)
 RN 128478-63-7 CAPLUS
 CN Indolo[3'',2'':4',5']pyrido[2',3':4,5]pyrrolo[2,3-c]quinoline, 7,12-dihydro- (9CI) (CA INDEX NAME)

L11 ANSWER 73 OF 162 CAPLUS COPYRIGHT 2005 ACS ON STN
 AN 1990:459654 CAPLUS
 DN 113:59654
 TI Synthetic studies towards cystodytin A: the preparation of novel cystodytin congeners
 AU Ciufolini, Marco A.; Byrne, Norman E.
 CS Dep. Chem., Rice Univ., Houston, TX, 77251, USA
 SO Tetrahedron Letters (1989), 30(41), 5559-62
 CODEN: TETLEA; ISSN: 0040-4039
 DT Journal
 LA English
 OS CASREACT 113:59654
 GI

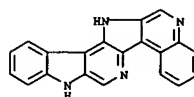


AB A sequence involving a modified Knoevenagel-Stobbe pyridine synthesis, and an unusual intramol. reaction between a quinone and an azide on I permits expeditious assembly of the ring system II of the cystodytin alkaloids.

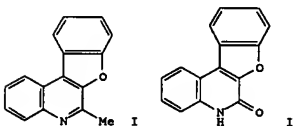
IT 128350-22-1P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation of)
 RN 128350-22-1 CAPLUS
 CN 7H-Indolo[2,3-c]quinoline-2-ethanol, 4-hydroxy-, α -acetate (9CI) (CA INDEX NAME)



L11 ANSWER 72 OF 162 CAPLUS COPYRIGHT 2005 ACS ON STN (Continued)

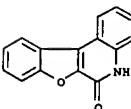


L11 ANSWER 74 OF 162 CAPLUS COPYRIGHT 2005 ACS ON STN
 AN 1990:458986 CAPLUS
 DN 113:58986
 TI The synthesis of benzofuroquinolines. VI. A new synthesis of benzofuro[2,3-c]quinoline derivatives
 AU Yamaguchi, Seiji; Ohhira, Yutaka; Yamada, Minoru; Michitani, Hitomi; Kawase, Yoshiyuki
 CS Fac. Sci., Toyama Univ., Toyama, 930, Japan
 SO Bulletin of the Chemical Society of Japan (1990), 63(3), 952-4
 CODEN: BCSJAS; ISSN: 0009-2673
 DT Journal
 LA English
 OS CASREACT 113:58986
 GI



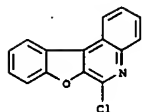
AB Two benzofuro[2,3-c]quinoline derivs., 6-methylbenzofuro[2,3-c]quinoline (I) and 6(5H)-benzofuro[2,3-c]quinolinone (II) were synthesized by the condensation of 2-amino-2'-hydroxybenzophenone with chloroacetone, Et bromoacetate, or chloroacetonitrile. The benzofuroquinolinone, thus obtained, was converted to 6-chloro- and 6-cyanobenzofuro[2,3-c]quinolines.

IT 128433-20-5P, Benzofuro[2,3-c]quinolin-6(5H)-one
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
 (preparation and chlorination of)
 RN 128433-20-5 CAPLUS
 CN Benzofuro[2,3-c]quinolin-6(5H)-one (9CI) (CA INDEX NAME)

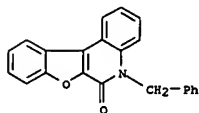


IT 128433-18-1P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
 (preparation and cyanation of)
 RN 128433-18-1 CAPLUS
 CN Benzofuro[2,3-c]quinoline, 6-chloro- (9CI) (CA INDEX NAME)

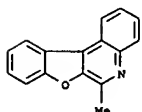
L11 ANSWER 74 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



IT 128433-17-0P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
 (preparation and debenzoylation of)
 RN 128433-17-0 CAPLUS
 CN Benzofuro[2,3-c]quinolin-6(5H)-one, 5-(phenylmethyl)- (9CI) (CA INDEX NAME)

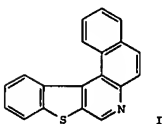


IT 128433-11-4P 128433-19-2P, Benzofuro[2,3-c]quinoline-6-carbonitrile
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation of)
 RN 128433-11-4 CAPLUS
 CN Benzofuro[2,3-c]quinoline, 6-methyl- (9CI) (CA INDEX NAME)

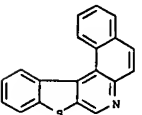


RN 128433-19-2 CAPLUS
 CN Benzofuro[2,3-c]quinoline-6-carbonitrile (9CI) (CA INDEX NAME)

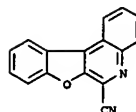
L11 ANSWER 75 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 1990:458370 CAPLUS
 DN 113:58370
 TI Disentangling proton connectivity networks in highly overlapped proton NMR spectra of polynuclear aromatics using 1D-HOHAHA
 AU Shoccoor, John P.; Crouch, Ronald C.; Martin, Gary E.; Cherif, Abdallah; Luo, Jiann Kuan; Castle, Raymond N.
 CS Div. Org. Chem., Burroughs Wellcome Co., Research Triangle Park, NC, 27709, USA
 SO Journal of Heterocyclic Chemistry (1990), 27(2), 455-8
 CODEN: JHCTAD; ISSN: 0022-152X
 DT Journal
 LA English
 GI



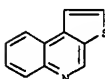
AB Application of the 1D homonuclear Hartmann-Hahn (1D-HOHAHA) experiment to establish proton-proton connectivity networks in highly overlapped four-spin systems in the proton NMR spectra of polynuclear arom. is described. Selective subspectra are contrasted to the data obtained in a COSY experiment on the same mol., benzo[f][1]benzothieno[2,3-c]quinoline (I).
 (I). Results from the 1D-HOHAHA technique are especially useful when component resonances from several spin systems are heavily overlapped.elayed 1D-HOHAHA provides the means of exploiting small, long-range-coupling pathways of polynuclear aroms.
 IT 128252-35-7, Benzo[f][1]benzothieno[2,3-c]quinoline
 RL: FRP (Properties)
 (proton-proton connectivity network in NMR of, 1-dimensional homonuclear Hartmann-Hahn study of)
 RN 128252-35-7 CAPLUS
 CN Benzo[f][1]benzothieno[2,3-c]quinoline (9CI) (CA INDEX NAME)



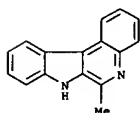
L11 ANSWER 74 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



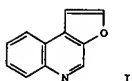
L11 ANSWER 76 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 1990:405570 CAPLUS
 DN 113:5570
 TI Natural abundance one-bond carbon-13-carbon-13 coupling constants and unambiguous assignments of carbon-13 NMR spectra of thieno[c]quinolines and thieno[c]isoquinolines
 AU Gronowitz, Salo; Servin, Rolf; Yang, Youhua
 CS Div. Org. Chem., Univ. Lund, Lund, S-221 00, Swed.
 SO Magnetic Resonance in Chemistry (1989), 27(11), 1099-101
 CODEN: MRCHEG; ISSN: 0749-1581
 DT Journal
 LA English
 AB The one-bond 13C-13C coupling constns. {1J(CC)} in all structurally possible thieno[c]quinolines, thieno[c]isoquinolines, phenanthridine, quinoline, and isoquinoline were measured at natural abundance by using the INADEQUATE pulse sequence technique. The unambiguous assignments of the 13C NMR spectra of thieno[c]quinolines and thieno[c]isoquinolines are reported.
 IT 233-04-5, Thieno[2,3-c]quinoline
 RL: FRP (Properties)
 (carbon-13 NMR of)
 RN 233-04-5 CAPLUS
 CN Thieno[2,3-c]quinoline (8CI, 9CI) (CA INDEX NAME)



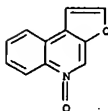
L11 ANSWER 77 OF 162 CAPLUS COPYRIGHT 2005 ACS ON STN
 AN 1990:69803 CAPLUS
 DN 112:35713
 TI Harman modulates the function of melatonin-opioid brain system which participates in traumatic shock development
 AU Samsonenko, R. A.; Dolzhenko, A. T.; El'skii, V. N.; Titievskii, A. V.
 CS Med. Inst., Donetsk, USSR
 SO Neirokhimiya (1989), 8(2), 191-6
 CODEN: NERODV; ISSN: 1027-8133
 DT Journal
 LA Russian
 AB Expts. With albino Wistar rats under normal conditions and after traumatic shock demonstrated that β -carbolines (harman and 3,4-tetramethylenharman at doses of 10 and 30 mg/kg, resp., modulated the secretion of opioid peptides (Leu-enkephalin and β -endorphin) into blood plasma. In intact animals β -carbolines increased the opioid peptide level in blood plasma; whereas the opioid level after traumatic shock was reduced by these compds. Concomitantly harman increased the level of melatonin in the pineal tissue of intact and shocked rats. Participation of cyclic nucleotides (cAMP and cGMP) in the modulating effect of β -carbolines on the melatonin-opioid system of rat brain is discussed.
 IT 125131-95-5, 3,4-Tetramethylenharman
 RL: BIOL (Biological study)
 (melatonin-opioid brain system response to, traumatic shock in relation to)
 RN 125131-95-5 CAPLUS
 CN 7H-indolo[2,3-c]quinoline, 6-methyl- (9CI) (CA INDEX NAME)



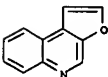
L11 ANSWER 79 OF 162 CAPLUS COPYRIGHT 2005 ACS ON STN
 AN 1990:35713 CAPLUS
 DN 112:35713
 TI First syntheses of furo[2,3-c]quinolines through palladium(0)-catalyzed coupling of furanboronic acid with functionalized haloarenes
 AU Yang, Youhua
 CS Chem. Cent., Univ. Lund, Lund, S-221 00, Swed.
 SO Synthetic Communications (1989), 19(5-6), 1001-8
 CODEN: SYNGAV; ISSN: 0039-7911
 DT Journal
 LA English
 OS CASREACT 112:35713
 GI



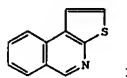
AB Two routes were explored for the synthesis of furo[2,3-c]quinoline (I). In each case, the synthesis is based on the cross-coupling of 2-formyl-3-furanboronic acid with functionalized haloarenes, catalyzed by a Pd(0) complex.
 IT 124553-77-1P, Furo[2,3-c]quinoline N-oxide
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
 (preparation and deoxygenation of, with phosphorus tribromide)
 RN 124553-77-1 CAPLUS
 CN Furo[2,3-c]quinoline, 5-oxide (9CI) (CA INDEX NAME)



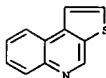
IT 232-99-5P, Furo[2,3-c]quinoline 124553-78-2P,
 4-Bromofuro[2,3-c]quinoline
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation of)
 RN 232-99-5 CAPLUS
 CN Furo[2,3-c]quinoline (8CI, 9CI) (CA INDEX NAME)



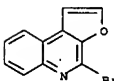
L11 ANSWER 78 OF 162 CAPLUS COPYRIGHT 2005 ACS ON STN
 AN 1990:35717 CAPLUS
 DN 112:35717
 TI The first synthesis of thieno[c]isoquinolines and an improved synthesis of
 phenanthridine and thieno[c]quinolines through palladium(0) catalyzed coupling of o-formylarylboronic acids with functionalized aryl halides
 AU Yang, Youhua; Hoernfeldt, Anna Britta; Gronowitz, Salo
 CS Chem. Cent., Univ. Lund, Lund, S-22100, Swed.
 SO Journal of Heterocyclic Chemistry (1989), 26(3), 865-8
 CODEN: JHTCAD; ISSN: 0022-152X
 DT Journal
 LA English
 OS CASREACT 112:35717
 GI



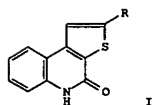
AB All three isomeric hitherto unknown thieno[c]isoquinolines, e.g. I, have been synthesized in high yields by the Pd(0)-catalyzed coupling of 2-OMCC6H4B(OH)2 with N-(o-halothienyl)carbamates. When 2-BrC6H4NHAc was coupled with o-formylarylboronic acids under Pd catalysis, phenanthridine, and thieno[c]quinolines were obtained in improved yields. Total assignments of 1H NMR spectra of thieno[c]isoquinolines and thieno[c]quinolines are reported.
 IT 233-04-5P, Thieno[2,3-c]quinoline
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation of)
 RN 233-04-5 CAPLUS
 CN Thieno[2,3-c]quinoline (8CI, 9CI) (CA INDEX NAME)



L11 ANSWER 79 OF 162 CAPLUS COPYRIGHT 2005 ACS ON STN (Continued)
 RN 124553-78-2 CAPLUS
 CN Furo[2,3-c]quinoline, 4-bromo- (9CI) (CA INDEX NAME)

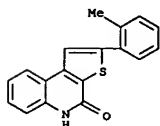


L11 ANSWER 80 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 1989:574020 CAPLUS
 DN 111:174020
 TI Preparation and pharmacology of a series of 2-aryl-4,5-dihydrothieno[2,3-c]quinolin-4-ones
 AU Omhette, J. E.; Lyet, S.; Xicluna, A.; Robert, J. F.; Panouse, J. J.
 CS Equipe Chim. Ther., UFR Sci. Med. Pharm., Besancon, F 25030, Fr.
 SO Annales Pharmaceutiques Francaises (1989), 46(6), 377-89
 CODEN: APFRAD; ISSN: 0003-4509
 DT Journal
 LA French
 GI



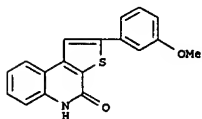
AB Title thienoquinolinones I (R = aryl) were prepared by condensing aminochalcones o-H₂NC₆H₄COCH:CHR with HSCH₂COEt, followed by dehydrogenation with chloranil or bromine. The products do not possess antipyretic-type analgetic activity (in contrast to thienoquinolines or -coumarins). I (R = Ph) has platelet aggregation inhibitory activity and its dihydro derivative has slight hypocholesteremic activity.

IT 123134-78-1P 123134-79-2P 123134-80-5P
 123134-81-6P 123134-82-7P 123134-83-8P
 123134-84-9P 123134-85-0P 123134-86-1P
 123134-87-2P 123134-88-3P 123134-89-4P
 123134-90-7P
 RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation) (preparation and NMR of)
 RN 123134-78-1 CAPLUS
 CN Thieno[2,3-c]quinolin-4(5H)-one, 2-(2-methylphenyl)- (9CI) (CA INDEX NAME)

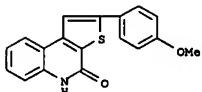


RN 123134-79-2 CAPLUS
 CN Thieno[2,3-c]quinolin-4(5H)-one, 2-(3-methylphenyl)- (9CI) (CA INDEX NAME)

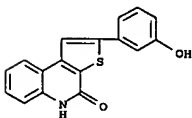
L11 ANSWER 80 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



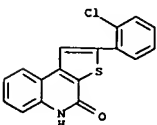
RN 123134-83-8 CAPLUS
 CN Thieno[2,3-c]quinolin-4(5H)-one, 2-(4-methoxyphenyl)- (9CI) (CA INDEX NAME)



RN 123134-84-9 CAPLUS
 CN Thieno[2,3-c]quinolin-4(5H)-one, 2-(3-hydroxyphenyl)- (9CI) (CA INDEX NAME)

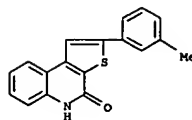


RN 123134-85-0 CAPLUS
 CN Thieno[2,3-c]quinolin-4(5H)-one, 2-(2-chlorophenyl)- (9CI) (CA INDEX NAME)

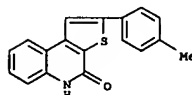


RN 123134-86-1 CAPLUS
 CN Thieno[2,3-c]quinolin-4(5H)-one, 2-(3-chlorophenyl)- (9CI) (CA INDEX NAME)

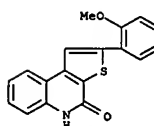
L11 ANSWER 80 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



RN 123134-80-5 CAPLUS
 CN Thieno[2,3-c]quinolin-4(5H)-one, 2-(4-methylphenyl)- (9CI) (CA INDEX NAME)

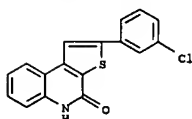


RN 123134-81-6 CAPLUS
 CN Thieno[2,3-c]quinolin-4(5H)-one, 2-(2-methoxyphenyl)- (9CI) (CA INDEX NAME)

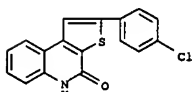


RN 123134-82-7 CAPLUS
 CN Thieno[2,3-c]quinolin-4(5H)-one, 2-(3-methoxyphenyl)- (9CI) (CA INDEX NAME)

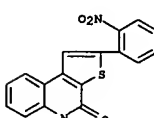
L11 ANSWER 80 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



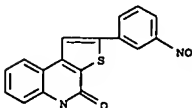
RN 123134-87-2 CAPLUS
 CN Thieno[2,3-c]quinolin-4(5H)-one, 2-(4-chlorophenyl)- (9CI) (CA INDEX NAME)



RN 123134-88-3 CAPLUS
 CN Thieno[2,3-c]quinolin-4(5H)-one, 2-(2-nitrophenyl)- (9CI) (CA INDEX NAME)

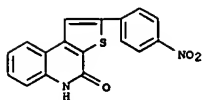


RN 123134-89-4 CAPLUS
 CN Thieno[2,3-c]quinolin-4(5H)-one, 2-(3-nitrophenyl)- (9CI) (CA INDEX NAME)

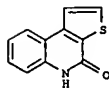


RN 123134-90-7 CAPLUS
 CN Thieno[2,3-c]quinolin-4(5H)-one, 2-(4-nitrophenyl)- (9CI) (CA INDEX NAME)

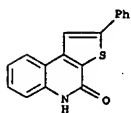
L11 ANSWER 80 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



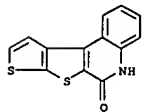
IT 35621-15-9P, Thieno[2,3-c]quinolin-4(5H)-one
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation of)
 RN 35621-15-9 CAPLUS
 CN Thieno[2,3-c]quinolin-4(5H)-one (6CI, 9CI) (CA INDEX NAME)



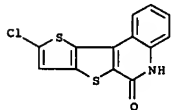
IT 123134-77-0P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation, platelet aggregation inhibitory activity, and NMR of)
 RN 123134-77-0 CAPLUS
 CN Thieno[2,3-c]quinolin-4(5H)-one, 2-phenyl- (9CI) (CA INDEX NAME)



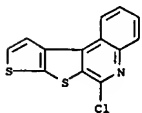
L11 ANSWER 81 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
 (Reactant or reagent)
 (prepn. and dehydrochlorination of, with phosphorus oxychloride)
 RN 119647-15-3 CAPLUS
 CN Thieno[3',2':4,5]thieno[2,3-c]quinolin-6(5H)-one (9CI) (CA INDEX NAME)



RN 119647-19-7 CAPLUS
 CN Thieno[2',3':4,5]thieno[2,3-c]quinolin-6(5H)-one, 9-chloro- (9CI) (CA INDEX NAME)



IT 119647-16-4P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
 (Reactant or reagent)
 (preparation and substitution reaction of, with sodium methoxide)
 RN 119647-16-4 CAPLUS
 CN Thieno[3',2':4,5]thieno[2,3-c]quinoline, 6-chloro- (9CI) (CA INDEX NAME)



IT 119647-17-5P 119647-21-1P, Thieno[2',3':4,5]thieno[2,3-c]quinoline
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation of)
 RN 119647-17-5 CAPLUS
 CN Thieno[3',2':4,5]thieno[2,3-c]quinoline, 6-methoxy- (9CI) (CA INDEX NAME)

L11 ANSWER 81 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN

AN 1989:135115 CAPLUS
 DN 110:135115

TI The synthesis of novel polycyclic heterocyclic ring systems via photocyclization. 1. Thieno[3',2':4,5]thieno[2,3-c]quinoline and thieno[2',3':4,5]thieno[2,3-c]quinoline

AU Castle, Steven L.; Luo, Jiann Kuan; Kudo, Hirotsuka; Castle, Raymond N.; Lee, Milton L.

CS Dep. Chem., Univ. South Florida, Tampa, FL, 33620, USA

SO Journal of Heterocyclic Chemistry (1988), 25(5), 1363-5

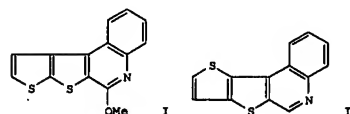
CODEN: JHTCAD; ISSN: 0022-152X

DT Journal

LA English

OS CASREACT 110:135115

GI



AB The synthesis of two previously unknown heterocyclic ring systems, namely, thienol[3',2':4,5]thieno[2,3-c]quinoline (I) and thieno[2',3':4,5]thieno[2,3-c]quinoline (II) is reported. These two novel

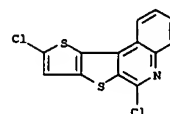
ring systems were assembled by photocyclization of the appropriate anilides.

IT 119647-20-0P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
 (Reactant or reagent)
 (preparation and catalytic dechlorination of)

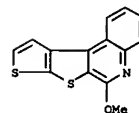
RN 119647-20-0 CAPLUS

CN Thieno[2',3':4,5]thieno[2,3-c]quinoline, 6,9-dichloro- (9CI) (CA INDEX NAME)



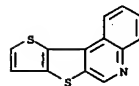
IT 119647-15-3P 119647-19-7P

L11 ANSWER 81 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

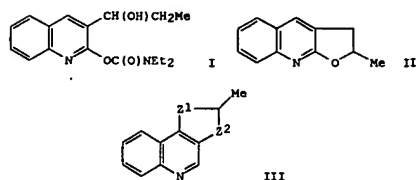


RN 119647-21-1 CAPLUS

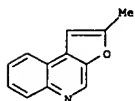
CN Thieno[2',3':4,5]thieno[2,3-c]quinoline (9CI) (CA INDEX NAME)



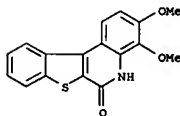
L11 ANSWER 82 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 1988:630844 CAPLUS
 DN 109:230844
 TI A new synthesis of 2,3-dihydrofuro[2,3-b], [2,3-c] and [3,2-c]quinolines
 AU Godard, A.; Jacquelin, J. M.; Queguiner, G.
 CS Inst. Natl. des Sci. Appl. Rouen, Mont St. Aignan, 76130, Fr.
 SO Journal of Heterocyclic Chemistry (1988), 25(3), 1053-4
 CODEN: JHTCAD; ISSN: 0022-152X
 DT Journal
 LA English
 OS CASREACT 109:230844
 GI



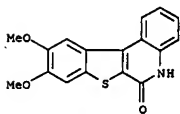
AB (Hydroxypropyl)quinolyl carbamates were converted to methylidihydrofuroquinolines. Carbamate I was heated with concentrated H2SO4 to give furoquinoline II. Similarly prepared were III (Z1 = CH2, Z2 = O) and III (Z1 = O, Z2 = CH2).
 IT 100633-68-9P
 RL: SPN (Synthetic preparation); PREP (Preparation) (preparation of)
 RN 100633-68-9 CAPLUS
 CN Furo[2,3-c]quinoline, 2-methyl- (9CI) (CA INDEX NAME)



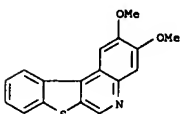
L11 ANSWER 83 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)
 NAME)



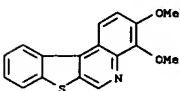
RN 116454-55-8 CAPLUS
 CN [1]Benzo[thieno[2,3-c]quinolin-6(5H)-one, 9,10-dimethoxy- (9CI) (CA INDEX NAME)



IT 116454-59-2P 116454-60-3P 116454-61-6P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent) (preparation and quaternization of)
 RN 116454-59-2 CAPLUS
 CN [1]Benzo[thieno[2,3-c]quinoline, 2,3-dimethoxy- (9CI) (CA INDEX NAME)

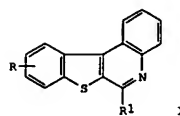


RN 116454-60-5 CAPLUS
 CN [1]Benzo[thieno[2,3-c]quinoline, 3,4-dimethoxy- (9CI) (CA INDEX NAME)

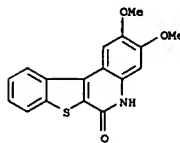


RN 116454-61-6 CAPLUS

L11 ANSWER 83 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 1988:630833 CAPLUS
 DN 109:230833
 TI The synthesis of dimethoxy- and trimethoxy[1]benzo[thieno[2,3-c]quinolines
 AU Stuart, John G.; Khora, Shinya; McKenney, J. Dew, Jr.; Castle, Raymond N.
 CS Dep. Chem., Univ. South Florida, Tampa, FL, 33620, USA
 SO Journal of Heterocyclic Chemistry (1987), 24(6), 1589-94
 CODEN: JHTCAD; ISSN: 0022-152X
 DT Journal
 LA English
 OS CASREACT 109:230833
 GI

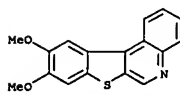


AB Three dimethoxy[1]benzo[thieno[2,3-c]quinolines I [R = 2,3-(MeO)2, 3,4-(MeO)2, 9,10-(MeO)2, R1 = H] were prepared by photocyclization of the appropriate 3-chloro-N-phenylbenzo[b]thiophene-2-carboxamides to [1]benzo[thieno[2,3-c]quinolin-6(5H)-ones followed by chlorination to I (R1 = Cl) and then dechlorination resulting in I (R1 = H). Reaction with Me iodide furnished the corresponding N-methylquaternary salts. Sodium methoxide readily converted I (R1 = Cl) to I (R1 = MeO).
 IT 116454-53-6P 116454-54-7P 116454-55-8P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent) (preparation and chlorination of)
 RN 116454-53-6 CAPLUS
 CN [1]Benzo[thieno[2,3-c]quinolin-6(5H)-one, 2,3-dimethoxy- (9CI) (CA INDEX NAME)

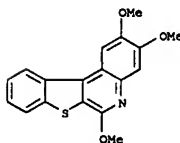


RN 116454-54-7 CAPLUS
 CN [1]Benzo[thieno[2,3-c]quinolin-6(5H)-one, 3,4-dimethoxy- (9CI) (CA INDEX NAME)

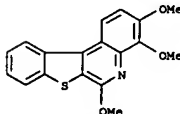
L11 ANSWER 83 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)
 CN [1]Benzo[thieno[2,3-c]quinoline, 9,10-dimethoxy- (9CI) (CA INDEX NAME)



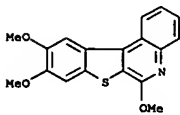
IT 116454-62-7P 116454-63-8P 116454-64-9P
 116454-66-1P 116454-67-2P 116454-68-3P
 RL: SPN (Synthetic preparation); PREP (Preparation) (preparation of)
 RN 116454-62-7 CAPLUS
 CN [1]Benzo[thieno[2,3-c]quinoline, 2,3,6-trimethoxy- (9CI) (CA INDEX NAME)



RN 116454-63-8 CAPLUS
 CN [1]Benzo[thieno[2,3-c]quinoline, 3,4,6-trimethoxy- (9CI) (CA INDEX NAME)

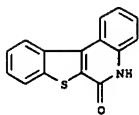


RN 116454-64-9 CAPLUS
 CN [1]Benzo[thieno[2,3-c]quinoline, 6,9,10-trimethoxy- (9CI) (CA INDEX NAME)

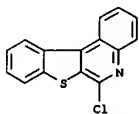


RN 116454-66-1 CAPLUS

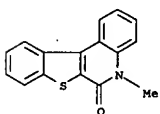
L11 ANSWER 84 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



RN 105577-11-5 CAPLUS
CN [1]Benzothieno[2,3-c]quinoline, 6-chloro- (9CI) (CA INDEX NAME)

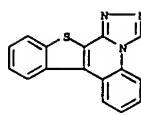


IT 105577-08-0P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and thiolation of, with phosphorus pentasulfide)
RN 105577-08-0 CAPLUS
CN [1]Benzothieno[2,3-c]quinolin-6(5H)-one, 5-methyl- (9CI) (CA INDEX NAME)

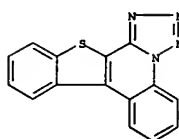


IT 115172-77-5P 115172-78-6P 115172-79-7P
115172-80-0P 115172-81-1P 115172-82-2P
115172-84-4P 115172-85-5P 115172-86-6P
115172-87-7P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)
RN 115172-77-5 CAPLUS
CN [1]Benzothieno[2,3-c]-1,2,4-triazolo[4,3-a]quinoline (9CI) (CA INDEX NAME)

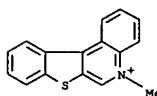
L11 ANSWER 84 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



RN 115172-78-6 CAPLUS
CN [1]Benzothieno[2,3-c]tetrazolo[1,5-a]quinoline (9CI) (CA INDEX NAME)

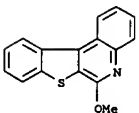


RN 115172-79-7 CAPLUS
CN [1]Benzothieno[2,3-c]quinolinium, 5-methyl-, iodide (9CI) (CA INDEX NAME)

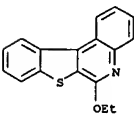


● I⁻
RN 115172-80-0 CAPLUS
CN [1]Benzothieno[2,3-c]quinoline, 6-methoxy- (9CI) (CA INDEX NAME)

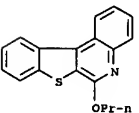
L11 ANSWER 84 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



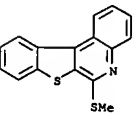
RN 115172-81-1 CAPLUS
CN [1]Benzothieno[2,3-c]quinoline, 6-ethoxy- (9CI) (CA INDEX NAME)



RN 115172-82-2 CAPLUS
CN [1]Benzothieno[2,3-c]quinoline, 6-propoxy- (9CI) (CA INDEX NAME)

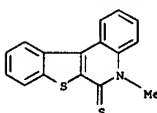


RN 115172-84-4 CAPLUS
CN [1]Benzothieno[2,3-c]quinoline, 6-(methylthio)- (9CI) (CA INDEX NAME)

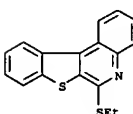


RN 115172-85-5 CAPLUS
CN [1]Benzothieno[2,3-c]quinoline-6(5H)-thione, 5-methyl- (9CI) (CA INDEX NAME)

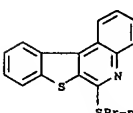
L11 ANSWER 84 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



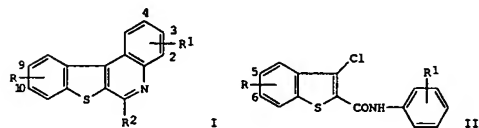
RN 115172-86-6 CAPLUS
CN [1]Benzothieno[2,3-c]quinoline, 6-(ethylthio)- (9CI) (CA INDEX NAME)



RN 115172-87-7 CAPLUS
CN [1]Benzothieno[2,3-c]quinoline, 6-(propylthio)- (9CI) (CA INDEX NAME)



L11 ANSWER 85 OF 162 CAPLUS COPYRIGHT 2005 ACS ON STN
 AN 1986:131622 CAPLUS
 DN 108:131622
 TI The synthesis of monomethoxy[1]benzothieno[2,3-c]quinolines
 AU McKenney, J. Dew, Jr.; Castle, Raymond N.
 CS Dep. Chem., Univ. South Florida, Tampa, FL, 33620, USA
 SO Journal of Heterocyclic Chemistry (1987), 24(4), 1103-8
 CODEN: JHTCAD; ISSN: 0022-152X
 DT Journal
 LA English
 OS CASREACT 108:131622
 GI.

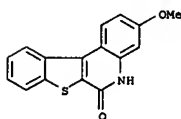


AB A series of monomethoxy[1]benzothieno[2,3-c]quinolines I (R = H, R1 = 2-MeO, 3-MeO, 4-MeO; R = 5-MeO, 10-MeO, R1 = H; R2 = H) were prepared by photocyclization of the appropriate 3-chloro-N-phenylbenzo[b]thiophene-2-carboxamides II (R = H, R1 = 2-MeO, 3-MeO, 4-MeO; R = 5-MeO, 10-MeO, R1 = H) to [1]benzothieno[2,3-c]quinolin-6(5H)-ones, followed by chlorination to 6-chloro[1]benzothieno[2,3-c]quinolines I (R2 = Cl), and then dechlorination resulting in the title compds. Reaction of I with MeI provided the corresponding N-Me quaternary salts. Also, conversion of 4-methoxy[1]benzothieno[2,3-c]quinoline-6(5H)-one to 4-methoxy-6-methylthio[1]benzothieno[2,3-c]quinoline I (R = H, R1 = 2-OMe, R2 = SMe) and 4,6-dimethoxy[1]benzothieno[2,3-c]quinoline I (R = H, R1 = 2-OMe, R2 = OMe) is described.

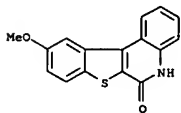
IT 113425-03-9P 113425-06-2P 113425-07-3P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
 (preparation and catalytic dechlorination of)

RN 113425-03-9 CAPLUS
 CN [1]Benzothieno[2,3-c]quinoline, 6-chloro-2-methoxy- (9CI) (CA INDEX NAME)

L11 ANSWER 85 OF 162 CAPLUS COPYRIGHT 2005 ACS ON STN (Continued)

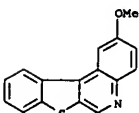


RN 113425-02-8 CAPLUS
 CN [1]Benzothieno[2,3-c]quinolin-6(5H)-one, 10-methoxy- (9CI) (CA INDEX NAME)

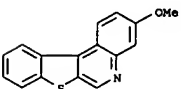


IT 113425-08-4P 113425-09-5P 113425-10-8P
 113425-11-9P 113425-12-0P 113425-18-6P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
 (preparation and methylation of, with iodomethane)

RN 113425-08-4 CAPLUS
 CN [1]Benzothieno[2,3-c]quinoline, 2-methoxy- (9CI) (CA INDEX NAME)

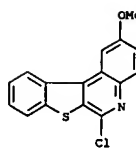


RN 113425-09-5 CAPLUS
 CN [1]Benzothieno[2,3-c]quinoline, 3-methoxy- (9CI) (CA INDEX NAME)

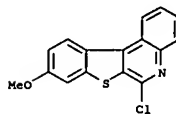


RN 113425-10-8 CAPLUS
 CN [1]Benzothieno[2,3-c]quinoline, 4-methoxy- (9CI) (CA INDEX NAME)

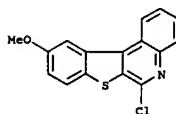
L11 ANSWER 85 OF 162 CAPLUS COPYRIGHT 2005 ACS ON STN (Continued)



RN 113425-06-2 CAPLUS
 CN [1]Benzothieno[2,3-c]quinoline, 6-chloro-9-methoxy- (9CI) (CA INDEX NAME)



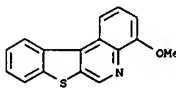
RN 113425-07-3 CAPLUS
 CN [1]Benzothieno[2,3-c]quinoline, 6-chloro-10-methoxy- (9CI) (CA INDEX NAME)



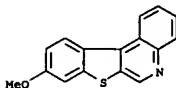
IT 113425-00-6P 113425-02-8P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation and chlorodehydration of, with phosphorus oxychloride)

RN 113425-00-6 CAPLUS
 CN [1]Benzothieno[2,3-c]quinolin-6(5H)-one, 3-methoxy- (9CI) (CA INDEX NAME)

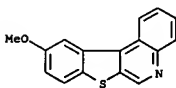
L11 ANSWER 85 OF 162 CAPLUS COPYRIGHT 2005 ACS ON STN (Continued)



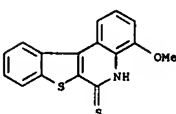
RN 113425-11-9 CAPLUS
 CN [1]Benzothieno[2,3-c]quinoline, 9-methoxy- (9CI) (CA INDEX NAME)



RN 113425-12-0 CAPLUS
 CN [1]Benzothieno[2,3-c]quinoline, 10-methoxy- (9CI) (CA INDEX NAME)



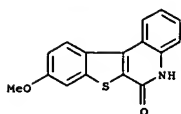
RN 113425-18-6 CAPLUS
 CN [1]Benzothieno[2,3-c]quinoline-6(5H)-thione, 4-methoxy- (9CI) (CA INDEX NAME)



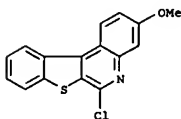
IT 113425-01-7P 113425-04-0P 113425-13-1P
 113425-14-2P 113425-15-3P 113425-16-4P
 113425-17-5P 113425-19-7P 113425-20-0P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation of)

RN 113425-01-7 CAPLUS
 CN [1]Benzothieno[2,3-c]quinolin-6(5H)-one, 9-methoxy- (9CI) (CA INDEX NAME)

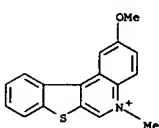
L11 ANSWER 85 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



RN 113425-04-0 CAPLUS
CN [1]Benzothieno[2,3-c]quinoline, 6-chloro-3-methoxy- (9CI) (CA INDEX NAME)

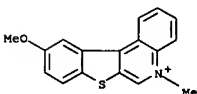


RN 113425-13-1 CAPLUS
CN [1]Benzothieno[2,3-c]quinolinium, 2-methoxy-5-methyl-, iodide (9CI) (CA INDEX NAME)

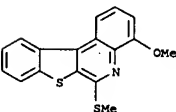
● I⁻

RN 113425-14-2 CAPLUS
CN [1]Benzothieno[2,3-c]quinolinium, 3-methoxy-5-methyl-, iodide (9CI) (CA INDEX NAME)

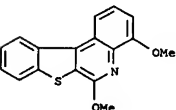
L11 ANSWER 85 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

● I⁻

RN 113425-19-7 CAPLUS
CN [1]Benzothieno[2,3-c]quinoline, 4-methoxy-6-(methylthio)- (9CI) (CA INDEX NAME)

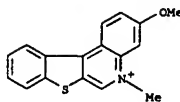


RN 113425-20-0 CAPLUS
CN [1]Benzothieno[2,3-c]quinoline, 4,6-dimethoxy- (9CI) (CA INDEX NAME)

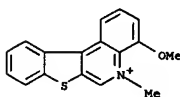


IT 113425-05-1P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation, catalytic dechlorination, and substitution reaction of)
RN 113425-05-1 CAPLUS
CN [1]Benzothieno[2,3-c]quinoline, 6-chloro-4-methoxy- (9CI) (CA INDEX NAME)

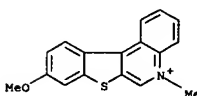
L11 ANSWER 85 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

● I⁻

RN 113425-15-3 CAPLUS
CN [1]Benzothieno[2,3-c]quinolinium, 4-methoxy-5-methyl-, iodide (9CI) (CA INDEX NAME)

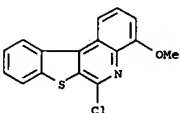
● I⁻

RN 113425-16-4 CAPLUS
CN [1]Benzothieno[2,3-c]quinolinium, 9-methoxy-5-methyl-, iodide (9CI) (CA INDEX NAME)

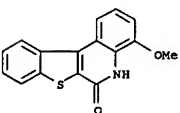
● I⁻

RN 113425-17-5 CAPLUS
CN [1]Benzothieno[2,3-c]quinolinium, 10-methoxy-5-methyl-, iodide (9CI) (CA INDEX NAME)

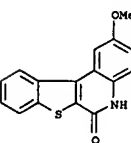
L11 ANSWER 85 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



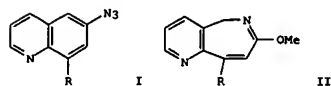
IT 70453-79-1P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation, chlorodehydration and sulfuration of)
RN 70453-79-1 CAPLUS
CN [1]Benzothieno[2,3-c]quinolin-6(5H)-one, 4-methoxy- (9CI) (CA INDEX NAME)



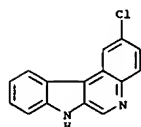
IT 70453-75-7P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation, hydride reduction, and chlorodehydration of)
RN 70453-75-7 CAPLUS
CN [1]Benzothieno[2,3-c]quinolin-6(5H)-one, 2-methoxy- (9CI) (CA INDEX NAME)



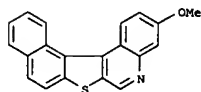
L11 ANSWER 86 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 1988:37681 CAPLUS
 DN 108:37681
 TI Synthetic routes to arylpyrido[2,3-c]azepines and -[3,2-c]azepines
 AU Schofield, Joseph; Smalley, Robert K.; Scopes, David I. C.; Patel, Dalpat I.
 CS Ramage Lab., Univ. Salford, Salford, M5 4WT, UK
 SO Journal of Chemical Research, Synopses (1987), (5), 164-5
 CODEN: JRPSCD; ISSN: 0308-2342
 DT Journal
 LA English
 OS CASREACT 108:37681
 GI



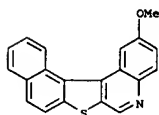
AB Photolysis of 6-azido-8-phenylquinoline I (R = Ph) in a mixture of 3M KOMe-MeOH-dioxane gave 52% pyridoazepine II (R = Ph). Similarly photolysis of azidoquinolines I (R = 2-ClC6H4, 2,5-F2C6H3) in KOH-MeOH-dioxane gave II in 72 and 48% yields resp.
 IT 112330-76-4P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation of)
 RN 112330-76-4 CAPLUS
 CN 7H-Indolo[2,3-c]quinoline, 2-chloro- (9CI) (CA INDEX NAME)



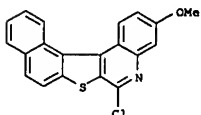
L11 ANSWER 87 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



RN 110821-90-4 CAPLUS
 CN Naphtho[1',2':4,5]thieno[2,3-c]quinoline, 2-methoxy- (9CI) (CA INDEX NAME)

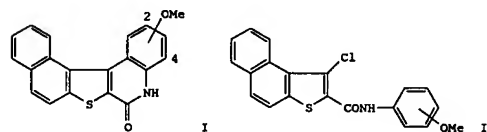


IT 110821-82-4P 110821-89-1P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
 (Reactant or reagent)
 (preparation and reductive dechlorination of)
 RN 110821-82-4 CAPLUS
 CN Naphtho[1',2':4,5]thieno[2,3-c]quinoline, 6-chloro-3-methoxy- (9CI) (CA INDEX NAME)

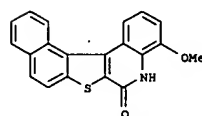


RN 110821-89-1 CAPLUS
 CN Naphtho[1',2':4,5]thieno[2,3-c]quinoline, 6-chloro-2-methoxy- (9CI) (CA INDEX NAME)

L11 ANSWER 87 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 1987:575908 CAPLUS
 DN 107:175908
 TI The synthesis of monomethoxynaphtho[1',2':4,5]thieno[2,3-c]quinolines
 AU Pakray, Sudabeh; Castle, Raymond N.
 CS Dep. Chem., Univ. South Florida, Tampa, FL, 33620, USA
 SO Journal of Heterocyclic Chemistry (1987), 24(1), 231-3
 CODEN: JHTCAD; ISSN: 0022-152X
 DT Journal
 LA English
 OS CASREACT 107:175908
 GI

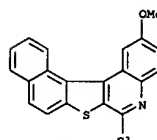


AB Title compds. I (2-, 3-, and 4-isomers) were prepared by the photocyclization of the resp. amides II. I were converted to their 6-chloro and 6-methylthio analogs.
 IT 110821-78-8P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
 (Reactant or reagent)
 (preparation and chlorination of, with phosphoryl chloride)
 RN 110821-78-8 CAPLUS
 CN Naphtho[1',2':4,5]thieno[2,3-c]quinolin-6(5H)-one, 4-methoxy- (9CI) (CA INDEX NAME)

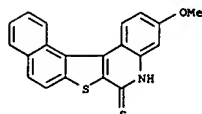


IT 110821-83-5P 110821-90-4P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
 (Reactant or reagent)
 (preparation and methylation of, with Me iodide)
 RN 110821-83-5 CAPLUS
 CN Naphtho[1',2':4,5]thieno[2,3-c]quinoline, 3-methoxy- (9CI) (CA INDEX NAME)

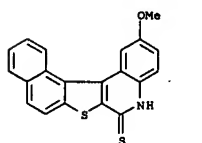
L11 ANSWER 87 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



IT 110821-85-7P 110821-92-6P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
 (Reactant or reagent)
 (preparation and S-methylation of)
 RN 110821-85-7 CAPLUS
 CN Naphtho[1',2':4,5]thieno[2,3-c]quinoline-6(5H)-thione, 3-methoxy- (9CI) (CA INDEX NAME)

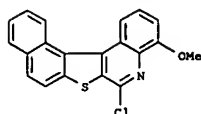


RN 110821-92-6 CAPLUS
 CN Naphtho[1',2':4,5]thieno[2,3-c]quinoline-6(5H)-thione, 2-methoxy- (9CI) (CA INDEX NAME)

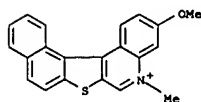


IT 110821-79-9P 110821-84-6P 110821-86-8P
 110821-91-5P 110821-93-7P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation of)
 RN 110821-79-9 CAPLUS
 CN Naphtho[1',2':4,5]thieno[2,3-c]quinoline, 6-chloro-4-methoxy- (9CI) (CA INDEX NAME)

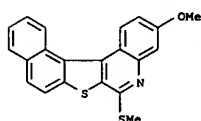
L11 ANSWER 87 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



RN 110821-84-6 CAPLUS
 CN Naphtho[1',2':4,5]thieno[2,3-c]quinolinium, 3-methoxy-5-methyl-, iodide (9CI) (CA INDEX NAME)

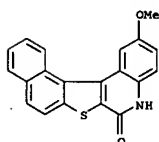


RN 110821-86-8 CAPLUS
 CN Naphtho[1',2':4,5]thieno[2,3-c]quinoline, 3-methoxy-6-(methylthio)- (9CI) (CA INDEX NAME)

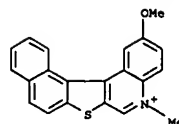


RN 110821-91-5 CAPLUS
 CN Naphtho[1',2':4,5]thieno[2,3-c]quinolinium, 2-methoxy-5-methyl-, iodide (9CI) (CA INDEX NAME)

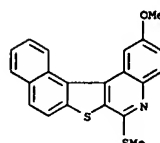
L11 ANSWER 87 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



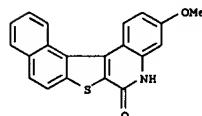
L11 ANSWER 87 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



RN 110821-93-7 CAPLUS
 CN Naphtho[1',2':4,5]thieno[2,3-c]quinoline, 2-methoxy-6-(methylthio)- (9CI) (CA INDEX NAME)



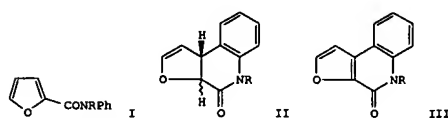
IT 110821-81-3P 110821-88-0P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
 (preparation, chlorination, and thiolactam formation of)
 RN 110821-81-3 CAPLUS
 CN Naphtho[1',2':4,5]thieno[2,3-c]quinolin-6(5H)-one, 3-methoxy- (9CI) (CA INDEX NAME)



RN 110821-88-0 CAPLUS
 CN Naphtho[1',2':4,5]thieno[2,3-c]quinolin-6(5H)-one, 2-methoxy- (9CI) (CA INDEX NAME)

L11 ANSWER 88 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN

RN 1987:554263 CAPLUS
 DN 107:154263
 TI Photochemistry of the amide system: furancarboxanilide
 AU Bates, Robert B.; Kane, Vinayak V.; Martin, Arnold R.; Mujumdar, Ratnakar B.; Ortega, Richard; Hatanaka, Yasumaru; Kanaoka, Yuichi; Sannohe, Kunio
 CS Dep. Chem., Univ. Arizona, Tucson, AZ, 85721, USA
 SO Journal of Organic Chemistry (1987), 52(14), 3178-80
 CODEN: JOCEAH; ISSN: 0022-3263
 DT Journal
 LA English
 OS CASREACT 107:154263
 GI

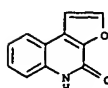


AB The photochem. transformations of the title compds. I (R = H, Me) in protic and aprotic solvents is reported. Irradiation of I in both protic and aprotic solvents gave mixts. of 3 to 6 cyclic products. Shorter reaction times gave more products with higher yields of the primary products, cis- and trans-furoquinolinones II (R = H, Me). Longer reaction times gave fewer products with higher yields of secondary products, e.g., furoquinolinones III. Unusually large vicinal coupling consts. (18-19 Hz)

in trans-II (R = H, Me) were shown by x-ray anal. on trans-II (R = Me) to be due mainly to the presence of unusually short C-C single bonds.

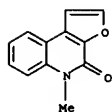
IT 35621-14-8P 67735-52-8P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation of)

RN 35621-14-8 CAPLUS
 CN Furo[2,3-c]quinolin-4(5H)-one (9CI) (CA INDEX NAME)

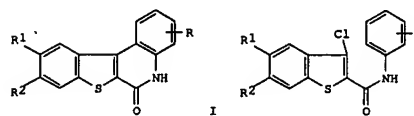


RN 67735-52-8 CAPLUS
 CN Furo[2,3-c]quinolin-4(5H)-one, 5-methyl- (9CI) (CA INDEX NAME)

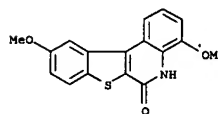
L11 ANSWER 88 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



L11 ANSWER 89 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 1987:196292 CAPLUS
 DN 106:196292
 TI The synthesis of dimethoxy[1]benzothieno[2,3-c]quinolines
 AU Pakray, Sudabeh; Castle, Raymond N.
 CS Dep. Chem., Univ. South Florida, Tampa, FL, 33620, USA
 SO Journal of Heterocyclic Chemistry (1986), 23(5), 1571-7
 CODEN: JHTCAD; ISSN: 0022-152X
 DT Journal
 LA English
 OS CASREACT 106:196292
 GI

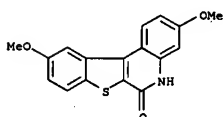


AB A series of dimethoxy[1]benzothieno[2,3-c]quinolines I (R = 2-, 3-, 4-MeO; R1 = H, R2 = Me; R1 = Me, R2 = H) have been prepared by photocyclization of the appropriate N-phenyl-3-chlorobenzo[b]thiophene-2-carboxamides II. The lactams obtained were converted into the thiolactams and their S-Me derivs. The lactams were also converted into the corresponding chloro derivs. which were catalytically dechlorinated into the dimethoxy[1]benzothieno[2,3-c]quinolines. The latter compds. were converted into the N-Me quaternary salts.
 IT 108144-31-6P 108144-32-7P 108144-33-8P 108144-52-1P 108144-53-2P 108144-54-3P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
 (preparation and chlorination of)
 RN 108144-31-6 CAPLUS
 CN [1]Benzothieno[2,3-c]quinolin-6(5H)-one, 4,10-dimethoxy- (9CI) (CA INDEX NAME)

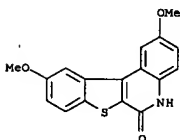


L11 ANSWER 89 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

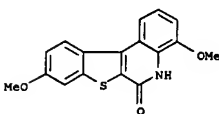
RN 108144-32-7 CAPLUS
 CN [1]Benzothieno[2,3-c]quinolin-6(5H)-one, 3,10-dimethoxy- (9CI) (CA INDEX NAME)



RN 108144-33-8 CAPLUS
 CN [1]Benzothieno[2,3-c]quinolin-6(5H)-one, 2,10-dimethoxy- (9CI) (CA INDEX NAME)

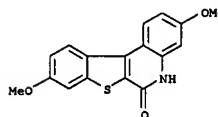


RN 108144-52-1 CAPLUS
 CN [1]Benzothieno[2,3-c]quinolin-6(5H)-one, 4,9-dimethoxy- (9CI) (CA INDEX NAME)

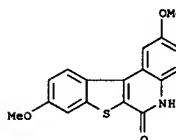


RN 108144-53-2 CAPLUS
 CN [1]Benzothieno[2,3-c]quinolin-6(5H)-one, 3,9-dimethoxy- (9CI) (CA INDEX NAME)

L11 ANSWER 89 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

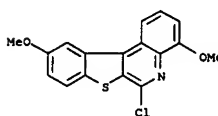


RN 108144-54-3 CAPLUS
 CN [1]Benzothieno[2,3-c]quinolin-6(5H)-one, 2,9-dimethoxy- (9CI) (CA INDEX NAME)



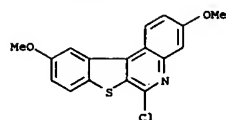
IT 108144-34-9P 108144-35-0P 108144-36-1P
 108144-55-4P 108144-56-5P 108144-57-6P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
 (preparation and dechlorination of)

RN 108144-34-9 CAPLUS
 CN [1]Benzothieno[2,3-c]quinoline, 6-chloro-4,10-dimethoxy- (9CI) (CA INDEX NAME)

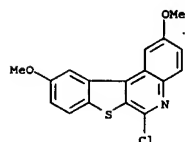


RN 108144-35-0 CAPLUS
 CN [1]Benzothieno[2,3-c]quinoline, 6-chloro-3,10-dimethoxy- (9CI) (CA INDEX NAME)

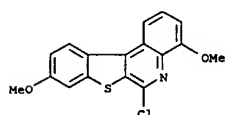
L11 ANSWER 89 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



RN 108144-36-1 CAPLUS
CN [1]Benzo[thieno[2,3-c]quinoline, 6-chloro-2,10-dimethoxy- (9CI) (CA INDEX NAME)

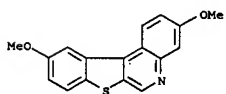


RN 108144-55-4 CAPLUS
CN [1]Benzo[thieno[2,3-c]quinoline, 6-chloro-4,9-dimethoxy- (9CI) (CA INDEX NAME)

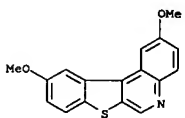


RN 108144-56-5 CAPLUS
CN [1]Benzo[thieno[2,3-c]quinoline, 6-chloro-3,9-dimethoxy- (9CI) (CA INDEX NAME)

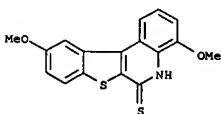
L11 ANSWER 89 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



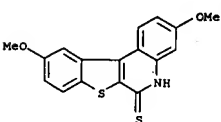
RN 108144-39-4 CAPLUS
CN [1]Benzo[thieno[2,3-c]quinoline, 2,10-dimethoxy- (9CI) (CA INDEX NAME)



RN 108144-43-0 CAPLUS
CN [1]Benzo[thieno[2,3-c]quinoline-6(5H)-thione, 4,10-dimethoxy- (9CI) (CA INDEX NAME)

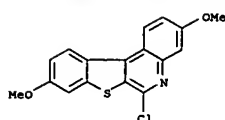


RN 108144-44-1 CAPLUS
CN [1]Benzo[thieno[2,3-c]quinoline-6(5H)-thione, 3,10-dimethoxy- (9CI) (CA INDEX NAME)

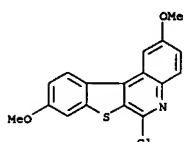


RN 108144-45-2 CAPLUS
CN [1]Benzo[thieno[2,3-c]quinoline-6(5H)-thione, 2,10-dimethoxy- (9CI) (CA INDEX NAME)

L11 ANSWER 89 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

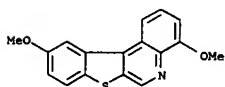


RN 108144-57-6 CAPLUS
CN [1]Benzo[thieno[2,3-c]quinoline, 6-chloro-2,9-dimethoxy- (9CI) (CA INDEX NAME)



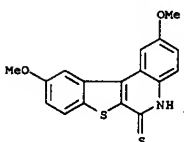
IT 108144-37-2P 108144-38-3P 108144-39-4P
108144-43-0P 108144-44-1P 108144-45-2P
108144-58-7P 108144-59-8P 108144-60-1P
108160-35-6P 108160-36-7P 108160-37-8P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
(Reactant or reagent)
(preparation and methylation of)

RN 108144-37-2 CAPLUS
CN [1]Benzo[thieno[2,3-c]quinoline, 4,10-dimethoxy- (9CI) (CA INDEX NAME)

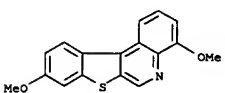


RN 108144-38-3 CAPLUS
CN [1]Benzo[thieno[2,3-c]quinoline, 3,10-dimethoxy- (9CI) (CA INDEX NAME)

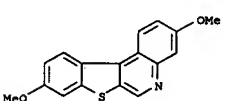
L11 ANSWER 89 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



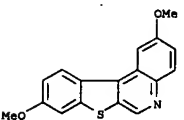
RN 108144-58-7 CAPLUS
CN [1]Benzo[thieno[2,3-c]quinoline, 4,9-dimethoxy- (9CI) (CA INDEX NAME)



RN 108144-59-8 CAPLUS
CN [1]Benzo[thieno[2,3-c]quinoline, 3,9-dimethoxy- (9CI) (CA INDEX NAME)

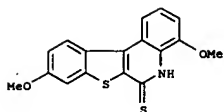


RN 108144-60-1 CAPLUS
CN [1]Benzo[thieno[2,3-c]quinoline, 2,9-dimethoxy- (9CI) (CA INDEX NAME)

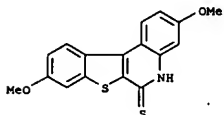


RN 108160-35-6 CAPLUS
CN [1]Benzo[thieno[2,3-c]quinoline-6(5H)-thione, 4,9-dimethoxy- (9CI) (CA INDEX NAME)

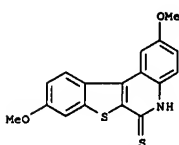
L11 ANSWER 89 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



RN 108160-36-7 CAPLUS
CN [1]Benzothieno[2,3-c]quinoline-6(5H)-thione, 3,9-dimethoxy- (9CI) (CA INDEX NAME)

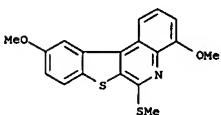


RN 108160-37-8 CAPLUS
CN [1]Benzothieno[2,3-c]quinoline-6(5H)-thione, 2,9-dimethoxy- (9CI) (CA INDEX NAME)

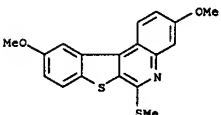


IT 108144-40-7P 108144-41-8P 108144-42-9P
108144-46-3P 108144-47-4P 108144-48-5P
108144-61-2P 108144-62-3P 108144-63-4P
108160-38-9P 108160-39-0P 108160-40-3P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)
RN 108144-40-7 CAPLUS
CN [1]Benzothieno[2,3-c]quinolinium, 4,10-dimethoxy-5-methyl-, iodide (9CI) (CA INDEX NAME)

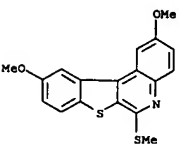
L11 ANSWER 89 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



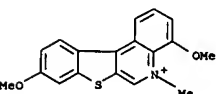
RN 108144-47-4 CAPLUS
CN [1]Benzothieno[2,3-c]quinoline, 3,10-dimethoxy-6-(methylthio)- (9CI) (CA INDEX NAME)



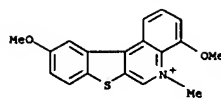
RN 108144-48-5 CAPLUS
CN [1]Benzothieno[2,3-c]quinoline, 2,10-dimethoxy-6-(methylthio)- (9CI) (CA INDEX NAME)



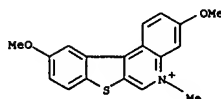
RN 108144-61-2 CAPLUS
CN [1]Benzothieno[2,3-c]quinolinium, 4,9-dimethoxy-5-methyl-, iodide (9CI) (CA INDEX NAME)

● I⁻

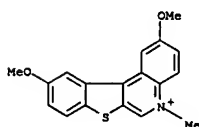
L11 ANSWER 89 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

● I⁻

RN 108144-41-8 CAPLUS
CN [1]Benzothieno[2,3-c]quinolinium, 3,10-dimethoxy-5-methyl-, iodide (9CI) (CA INDEX NAME)

● I⁻

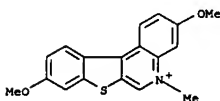
RN 108144-42-9 CAPLUS
CN [1]Benzothieno[2,3-c]quinolinium, 2,10-dimethoxy-5-methyl-, iodide (9CI) (CA INDEX NAME)

● I⁻

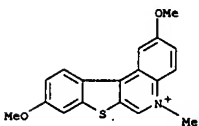
RN 108144-46-3 CAPLUS
CN [1]Benzothieno[2,3-c]quinoline, 4,10-dimethoxy-6-(methylthio)- (9CI) (CA INDEX NAME)

L11 ANSWER 89 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

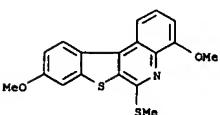
RN 108144-62-3 CAPLUS
CN [1]Benzothieno[2,3-c]quinolinium, 3,9-dimethoxy-5-methyl-, iodide (9CI) (CA INDEX NAME)

● I⁻

RN 108144-63-4 CAPLUS
CN [1]Benzothieno[2,3-c]quinolinium, 2,9-dimethoxy-5-methyl-, iodide (9CI) (CA INDEX NAME)

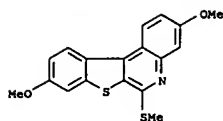
● I⁻

RN 108160-38-9 CAPLUS
CN [1]Benzothieno[2,3-c]quinoline, 4,9-dimethoxy-6-(methylthio)- (9CI) (CA INDEX NAME)

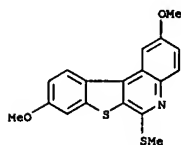


RN 108160-39-0 CAPLUS
CN [1]Benzothieno[2,3-c]quinoline, 3,9-dimethoxy-6-(methylthio)- (9CI) (CA INDEX NAME)

L11 ANSWER 89 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

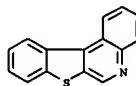


RN 108160-40-3 CAPLUS
 CN [1]Benzothieno[2,3-c]quinoline, 2,9-dimethoxy-6-(methylthio)- (9CI) (CA INDEX NAME)



L11 ANSWER 90 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN

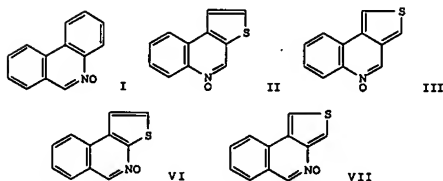
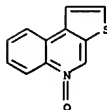
AN 1987:77407 CAPLUS
 DN 106:77407
 TI New pulse sequence for long-range two-dimensional heteronuclear NMR chemical shift correlation
 AU Zektzer, Andrew S.; Quast, Michael J.; Linz, Gary S.; Martin, Gary E.; McKenney, J. Dew; Johnston, Milton D., Jr.; Castle Raymond N.
 CS Coll. Pharm., Univ. Houston, Houston, TX, 77004, USA
 SO Magnetic Resonance in Chemistry (1986), 24(12), 1083-8
 CODEN: MRCHEG; ISSN: 0749-1581
 DT Journal
 LA English
 AB Techniques available for long-range heteronuclear chemical shift correlation are briefly reviewed. A new pulse sequence for long-range heteronuclear chemical shift correlation is described. Comparison of the results obtained using the new pulse sequence with those from conventional long-range optimized heteronuclear chemical shift correlation is presented. Total assignments of the 1H and 13C NMR spectra of 1-benzothieno[2,3-c]quinoline are reported.
 IT 57289-92-6
 RL: PRP (Properties)
 (NMR of, pulse sequence for long-range 2-dimensional heteronuclear shift correlation in)
 RN 57289-92-6 CAPLUS
 CN [1]Benzothieno[2,3-c]quinoline (9CI) (CA INDEX NAME)



L11 ANSWER 91 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN

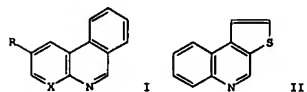
AN 1987:67164 CAPLUS
 DN 106:67164
 TI Convenient syntheses of phenanthridine N-oxide and some thieno-fused analogs
 AU Gronowitz, S.; Hoernfeldt, A. B.; Yang, Y. H.
 CS Chem. Cent., Univ. Lund, Lund, S-221 00, Swed.
 SO Chemica Scripta (1986), 26(2), 383-6
 CODEN: CSRPB9; ISSN: 0004-2056
 DT Journal
 LA English
 OS CASREACT 106:67164
 GI

L11 ANSWER 91 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)
 CN Thieno[2,3-c]quinoline, 5-oxide (9CI) (CA INDEX NAME)

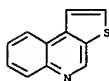


AB The Pd(0)-catalyzed coupling between o-bromonitrobenzene and o-formylbenzeneboronic acid, 2-formyl-3-thiopheneboronic acid and 4-formyl-3-thiopheneboronic acid in aqueous ethylene glycol di-Me ether in the presence of sodium bicarbonate gave 2-formyl-2'-nitrobiphenyl, 2-formyl-3-(o-nitrophenyl)thiophene and 4-formyl-3-(o-nitrophenyl)thiophene in good yield. Reduction of the biphenyl with ammoniacal ferrousulfate led to a new synthesis of phenanthridine N-oxide (I). From the two phenylthiophenes, the previously unknown tricyclic systems thieno[2,3-c]quinoline N-oxide (II) and thieno[3,4-c]quinoline N-oxide (III) were obtained in high yield. Coupling of 2-formylbenzeneboronic acid with 3-bromo-2-nitrothiophene gave a high yield of 3-(o-formylphenyl)-4-nitrothiophene (IV), while with 3-bromo-2-nitrothiophene only a 40% yield of 3-(o-formylphenyl)-2-nitrothiophene (V) was formed. This was even more pronounced in the reaction of the o-formylbenzeneboronic acid with 2-bromo-3-nitrothiophene, in which case only bis-(3-nitro-2-thienyl)sulfide was obtained in low yield. Ring closure of IV and V by reduction with ferrous sulfate in aqueous ammonia gave the previously unknown tricyclic systems thieno[2,3-c]isoquinoline N-oxide (VI) and thieno[3,4-c]isoquinoline N-oxide (VII) in very good yields.
 IT 106561-66-4P
 RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation) (preparation and NMR of)
 RN 106561-66-4 CAPLUS

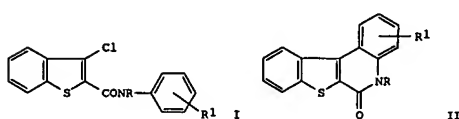
L11 ANSWER 92 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 1987:67163 CAPLUS
 DN 106:67163
 TI A new convenient synthesis of phenanthridine and some benzo- and thieno-c-fused quinolines and 1,8-naphthyridines
 AU Gronowitz, S.; Hoernfeldt, A. B.; Yang, Y. H.
 CS Chem. Cent., Univ. Lund, Lund, S-221 00, Swed.
 SO Chemica Scripta (1986), 26(2), 311-14
 CODEN: CSRPB9; ISSN: 0004-2056
 DT Journal
 LA English
 OS CASREACT 106:67163
 GI



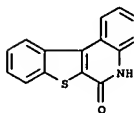
AB Title compds., e.g., I (X = CH, R = H; X = N, R = Me) and II were prepared by reacting 2-formylbenzeneboronic acid or isomeric formylthiopheneboronic acids with 2-bromoaniline or 2-amino-3-bromo-5-methylpyridine in the presence of (Ph₃P)₄Pd catalyst in basic medium.
 IT 233-04-5P
 RL: SPN (Synthetic preparation); PREP (Preparation) (preparation of)
 RN 233-04-5 CAPLUS
 CN Thieno[2,3-c]quinoline (8CI, 9CI) (CA INDEX NAME)



L11 ANSWER 93 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 1987:67157 CAPLUS
 DN 106:67157
 TI Synthesis of condensed carbostyrils
 AU Jayachandran, T.; Paramasivam, R.; Ramakrishnan, V. T.
 CS Dep. Org. Chem., Univ. Madras, Madras, 600 025, India
 SO Indian Journal of Chemistry, Section B: Organic Chemistry Including Medicinal Chemistry (1986), 25B(1), 89-91
 CODEN: IJSBDB; ISSN: 0376-4699
 DT Journal
 LA English
 OS CASREACT 106:67157
 GI

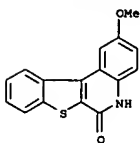


AB 3-Chloro-1-benzothiophene-2-carboxanilides I (R = Me, Et, H, R1 = H; R = H, R1 = Me, 2,5-Me2, 4-MeO) on treatment with AlCl₃ or under irradiation give [1]benzothieno[2,3-c]quinolin-6(5H)-ones II (R as above; R1 = H, 2-Me, 1,4-Me2, 2-MeO)
 IT 57100-47-7P 70453-75-7P 70453-76-8P
 105577-08-0P 105577-09-1P 105577-10-4P
 105577-11-5P 105577-12-6P 105577-13-7P
 RL: SPN (Synthetic preparation); PREP (Preparation) (preparation of)
 RN 57100-47-7 CAPLUS
 CN [1]Benzothieno[2,3-c]quinolin-6(5H)-one (9CI) (CA INDEX NAME)

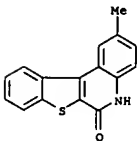


RN 70453-75-7 CAPLUS
 CN [1]Benzothieno[2,3-c]quinolin-6(5H)-one, 2-methoxy- (9CI) (CA INDEX NAME)

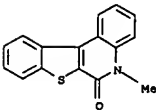
L11 ANSWER 93 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



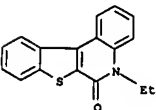
RN 70453-76-8 CAPLUS
 CN [1]Benzothieno[2,3-c]quinolin-6(5H)-one, 2-methyl- (9CI) (CA INDEX NAME)



RN 105577-08-0 CAPLUS
 CN [1]Benzothieno[2,3-c]quinolin-6(5H)-one, 5-methyl- (9CI) (CA INDEX NAME)

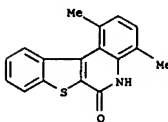


RN 105577-09-1 CAPLUS
 CN [1]Benzothieno[2,3-c]quinolin-6(5H)-one, 5-ethyl- (9CI) (CA INDEX NAME)

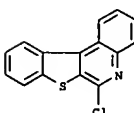


RN 105577-10-4 CAPLUS
 CN [1]Benzothieno[2,3-c]quinolin-6(5H)-one, 1,4-dimethyl- (9CI) (CA INDEX NAME)

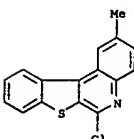
L11 ANSWER 93 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



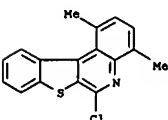
RN 105577-11-5 CAPLUS
 CN [1]Benzothieno[2,3-c]quinolin-6(5H)-one, 6-chloro- (9CI) (CA INDEX NAME)



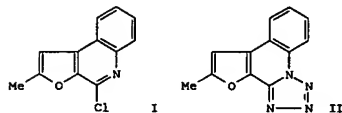
RN 105577-12-6 CAPLUS
 CN [1]Benzothieno[2,3-c]quinolin-6(5H)-one, 6-chloro-2-methyl- (9CI) (CA INDEX NAME)



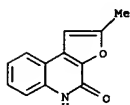
RN 105577-13-7 CAPLUS
 CN [1]Benzothieno[2,3-c]quinolin-6(5H)-one, 6-chloro-1,4-dimethyl- (9CI) (CA INDEX NAME)



L11 ANSWER 94 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 1986:109506 CAPLUS
 DN 104:109506
 TI Studies on furan derivatives. X. Preparation of 2-methylfuro[2,3-c]quinoline derivatives
 AU Usui, Toshinao; Tsubone, Yasuo; Tanaka, Akira
 CS Fac. Pharm. Sci., Josai Univ., Sakado, 350-02, Japan
 SO Journal of Heterocyclic Chemistry (1985), 22(3), 849-52
 CODEN: JHTCAD; ISSN: 0022-152X
 DT Journal
 LA English
 OS CASREACT 104:109506
 GI

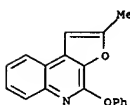


AB 4-Chloro-2-methylfuro[2,3-c]quinoline (I) was prepared from Et 3-(2-nitrophenyl)-5-methyl-2-furoate and allowed to react with nucleophiles to afford the corresponding 4-substituted 2-methylfuro[2,3-c]quinoline derivs. On treatment of I with KN3 in Me2SO, tetrazole II was formed by azido-tetrazolo isomerization. 2-Methylfuro[2,3-c]quinoline was prepared by the reduction of I.
 IT 100633-66-7P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
 (preparation and chlorination of)
 RN 100633-66-7 CAPLUS
 CN Furo[2,3-c]quinolin-4(5H)-one, 2-methyl- (9CI) (CA INDEX NAME)

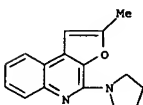


IT 100633-67-8P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
 (preparation and reactions of)

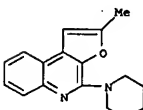
L11 ANSWER 94 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)
 RN 100633-71-4 CAPLUS
 CN Furo[2,3-c]quinoline, 2-methyl-4-phenoxy- (9CI) (CA INDEX NAME)



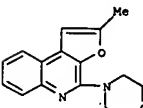
RN 100633-72-5 CAPLUS
 CN Furo[2,3-c]quinoline, 2-methyl-4-(1-pyrrolidinyl)- (9CI) (CA INDEX NAME)



RN 100633-73-6 CAPLUS
 CN Furo[2,3-c]quinoline, 2-methyl-4-(1-piperidinyl)- (9CI) (CA INDEX NAME)

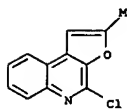


RN 100633-74-7 CAPLUS
 CN Furo[2,3-c]quinoline, 2-methyl-4-(4-morpholinyl)- (9CI) (CA INDEX NAME)

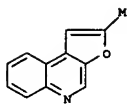


RN 100633-75-8 CAPLUS
 CN Furo[2,3-c]quinoline-4-carbonitrile, 2-methyl- (9CI) (CA INDEX NAME)

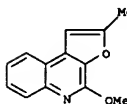
L11 ANSWER 94 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)
 RN 100633-67-8 CAPLUS
 CN Furo[2,3-c]quinoline, 4-chloro-2-methyl- (9CI) (CA INDEX NAME)



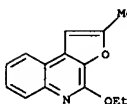
IT 100633-68-9P 100633-69-0P 100633-70-3P
 100633-71-4P 100633-72-5P 100633-73-6P
 100633-74-7P 100633-75-8P 100633-76-9P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation of)
 RN 100633-68-9 CAPLUS
 CN Furo[2,3-c]quinoline, 2-methyl- (9CI) (CA INDEX NAME)



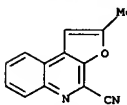
RN 100633-69-0 CAPLUS
 CN Furo[2,3-c]quinoline, 4-methoxy-2-methyl- (9CI) (CA INDEX NAME)



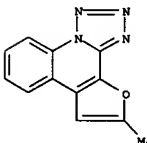
RN 100633-70-3 CAPLUS
 CN Furo[2,3-c]quinoline, 4-ethoxy-2-methyl- (9CI) (CA INDEX NAME)



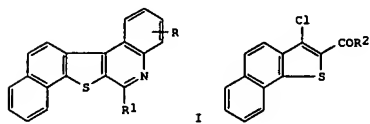
L11 ANSWER 94 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



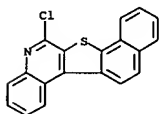
RN 100633-76-9 CAPLUS
 CN Furo[2,3-c]tetrazolo[1,5-a]quinoline, 5-methyl- (9CI) (CA INDEX NAME)



L11 ANSWER 95 OF 162 CAPLUS COPYRIGHT 2005 ACS ON STN
 AN 1985:220719 CAPLUS
 DN 102:220719
 TI Synthesis of the isomeric monomethyl derivatives of the novel
 naphtho[2',1':4,5]thieno[2,3-c]quinoline ring system
 AU Kudo, Hirotaka; Castle, Raymond N.; Lee, Milton L.
 CS Dep. Chem., Univ. South Florida, Tampa, FL, 33620, USA
 SO Journal of Heterocyclic Chemistry (1985), 22(1), 211-14
 CODEN: JHTCAD; ISSN: 0022-152X
 DT Journal
 LA English
 OS CASREACT 102:220719
 GI

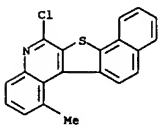


AB Novel naphtho[2',1':4,5]thieno[2,3-c]quinolines I (R = H, Me; R1 = H) were prepared by treating 2-ClO₂H₂CHCO₂H with SOCl₂ to give 3-chloronaphtho[1,2-b]thiophene-2-carbonyl chloride II (R2 = Cl). II (R2 = Cl) reacted with RC₆H₄NH₂ to yield the carboxamides III (R2 = RC₆H₄NH). The carboxamides were photocyclized, and chlorinated with POCl₃ to give I (R1 = Cl) which, after catalytic hydrogenolysis, yielded I (R1 = H).
 IT 96547-30-7P 96547-33-0P 96547-36-3P
 96547-40-9P 96547-42-1P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
 (preparation and catalytic dechlorination of)
 RN 96547-30-7 CAPLUS
 CN Naphtho[2',1':4,5]thieno[2,3-c]quinoline, 6-chloro- (9CI) (CA INDEX NAME)

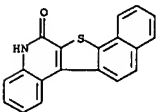


RN 96547-33-0 CAPLUS
 CN Naphtho[2',1':4,5]thieno[2,3-c]quinoline, 6-chloro-4-methyl- (9CI) (CA INDEX NAME)

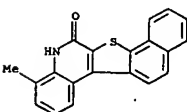
L11 ANSWER 95 OF 162 CAPLUS COPYRIGHT 2005 ACS ON STN (Continued)



IT 96547-29-4P 96547-32-9P 96547-35-2P
 96547-38-5P 96547-39-6P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
 (preparation and chlorination of, with phosphorus oxychloride)
 RN 96547-29-4 CAPLUS
 CN Naphtho[2',1':4,5]thieno[2,3-c]quinolin-6(5H)-one (9CI) (CA INDEX NAME)

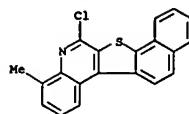


RN 96547-32-9 CAPLUS
 CN Naphtho[2',1':4,5]thieno[2,3-c]quinolin-6(5H)-one, 4-methyl- (9CI) (CA INDEX NAME)

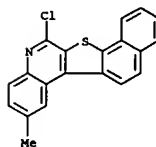


RN 96547-35-2 CAPLUS
 CN Naphtho[2',1':4,5]thieno[2,3-c]quinolin-6(5H)-one, 2-methyl- (9CI) (CA INDEX NAME)

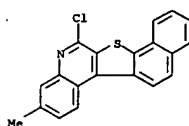
L11 ANSWER 95 OF 162 CAPLUS COPYRIGHT 2005 ACS ON STN (Continued)



RN 96547-36-3 CAPLUS
 CN Naphtho[2',1':4,5]thieno[2,3-c]quinoline, 6-chloro-2-methyl- (9CI) (CA INDEX NAME)

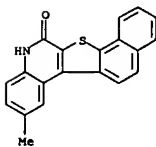


RN 96547-40-9 CAPLUS
 CN Naphtho[2',1':4,5]thieno[2,3-c]quinoline, 6-chloro-3-methyl- (9CI) (CA INDEX NAME)

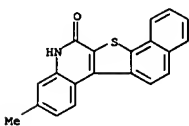


RN 96547-42-1 CAPLUS
 CN Naphtho[2',1':4,5]thieno[2,3-c]quinoline, 6-chloro-1-methyl- (9CI) (CA INDEX NAME)

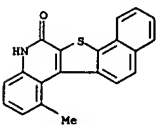
L11 ANSWER 95 OF 162 CAPLUS COPYRIGHT 2005 ACS ON STN (Continued)



RN 96547-38-5 CAPLUS
 CN Naphtho[2',1':4,5]thieno[2,3-c]quinolin-6(5H)-one, 3-methyl- (9CI) (CA INDEX NAME)

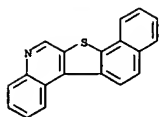


RN 96547-39-6 CAPLUS
 CN Naphtho[2',1':4,5]thieno[2,3-c]quinolin-6(5H)-one, 1-methyl- (9CI) (CA INDEX NAME)

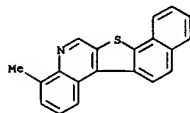


IT 96547-31-8P 96547-34-1P 96547-37-4P
 96547-41-0P 96547-43-2P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation of)
 RN 96547-31-8 CAPLUS
 CN Naphtho[2',1':4,5]thieno[2,3-c]quinoline (9CI) (CA INDEX NAME)

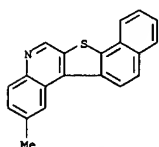
L11 ANSWER 95 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



RN 96547-34-1 CAPLUS
 CN Naphtho[2',1':4,5]thieno[2,3-c]quinoline, 4-methyl- (9CI) (CA INDEX NAME)

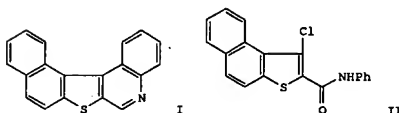


RN 96547-37-4 CAPLUS
 CN Naphtho[2',1':4,5]thieno[2,3-c]quinoline, 2-methyl- (9CI) (CA INDEX NAME)

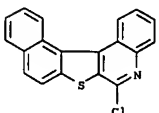


RN 96547-41-0 CAPLUS
 CN Naphtho[2',1':4,5]thieno[2,3-c]quinoline, 3-methyl- (9CI) (CA INDEX NAME)

L11 ANSWER 96 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 1985:131947 CAPLUS
 DN 102:131947
 TI Synthesis of the monomethyl isomers of naphtho[1',2':4,5]thieno[2,3-c]quinoline
 AU Kudo, Hirotaka; Castle, Raymond N.; Lee, Milton L.
 CS Dep. Chem., Univ. South Florida, Tampa, FL, 33620, USA
 SO Journal of Heterocyclic Chemistry (1984), 21(6), 1761-4
 CODEN: JHTCAD; ISSN: 0022-152X
 DT Journal
 LA English
 OS CASREACT 102:131947
 GI

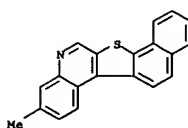


AB The synthesis of the title compound (I) and four monomethyl isomers is described. Thus, photochem cyclization of amide II followed by chlorination with POC13 and catalytic dechlorination gave I.
 IT 95518-77-7P 95518-80-2P 95518-83-5P
 95518-86-8P 95518-89-1P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
 (preparation and catalytic dechlorination of)
 RN 95518-77-7 CAPLUS
 CN Naphtho[1',2':4,5]thieno[2,3-c]quinoline, 6-chloro- (9CI) (CA INDEX NAME)

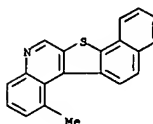


RN 95518-80-2 CAPLUS
 CN Naphtho[1',2':4,5]thieno[2,3-c]quinoline, 6-chloro-4-methyl- (9CI) (CA INDEX NAME)

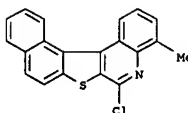
L11 ANSWER 95 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



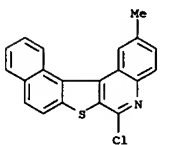
RN 96547-43-2 CAPLUS
 CN Naphtho[2',1':4,5]thieno[2,3-c]quinoline, 1-methyl- (9CI) (CA INDEX NAME)



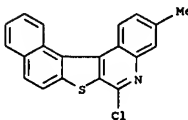
L11 ANSWER 96 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



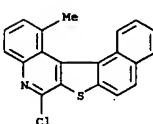
RN 95518-83-5 CAPLUS
 CN Naphtho[1',2':4,5]thieno[2,3-c]quinoline, 6-chloro-2-methyl- (9CI) (CA INDEX NAME)



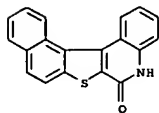
RN 95518-86-8 CAPLUS
 CN Naphtho[1',2':4,5]thieno[2,3-c]quinoline, 6-chloro-3-methyl- (9CI) (CA INDEX NAME)



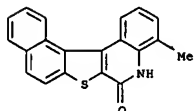
RN 95518-89-1 CAPLUS
 CN Naphtho[1',2':4,5]thieno[2,3-c]quinoline, 6-chloro-1-methyl- (9CI) (CA INDEX NAME)



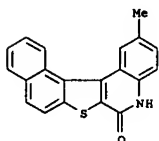
L11 ANSWER 96 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)
 IT 95518-76-6P 95518-79-9P 95518-82-4P
 95518-85-7P 95518-88-0P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
 (Reactant or reagent)
 (preparation and chlorination of)
 RN 95518-76-6 CAPLUS
 CN Naphtho[1',2':4,5]thieno[2,3-c]quinolin-6(5H)-one (9CI) (CA INDEX NAME)



RN 95518-79-9 CAPLUS
 CN Naphtho[1',2':4,5]thieno[2,3-c]quinolin-6(5H)-one, 4-methyl- (9CI) (CA INDEX NAME)

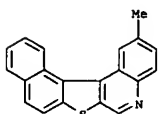


RN 95518-82-4 CAPLUS
 CN Naphtho[1',2':4,5]thieno[2,3-c]quinolin-6(5H)-one, 2-methyl- (9CI) (CA INDEX NAME)

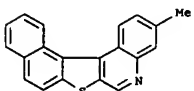


RN 95518-85-7 CAPLUS
 CN Naphtho[1',2':4,5]thieno[2,3-c]quinolin-6(5H)-one, 3-methyl- (9CI) (CA INDEX NAME)

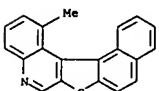
L11 ANSWER 96 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)
 RN 95518-84-6 CAPLUS
 CN Naphtho[1',2':4,5]thieno[2,3-c]quinoline, 2-methyl- (9CI) (CA INDEX NAME)



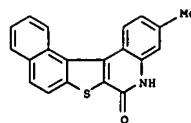
RN 95518-87-9 CAPLUS
 CN Naphtho[1',2':4,5]thieno[2,3-c]quinoline, 3-methyl- (9CI) (CA INDEX NAME)



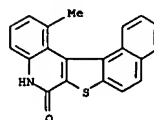
RN 95518-90-4 CAPLUS
 CN Naphtho[1',2':4,5]thieno[2,3-c]quinoline, 1-methyl- (9CI) (CA INDEX NAME)



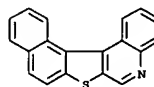
L11 ANSWER 96 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



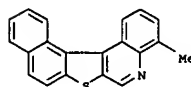
RN 95518-88-0 CAPLUS
 CN Naphtho[1',2':4,5]thieno[2,3-c]quinolin-6(5H)-one, 1-methyl- (9CI) (CA INDEX NAME)



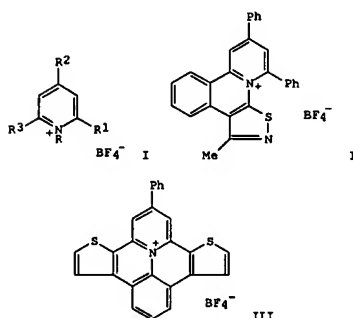
IT 95518-78-8P 95518-81-3P 95518-84-6P
 95518-87-9P 95518-90-4P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation of)
 RN 95518-78-8 CAPLUS
 CN Naphtho[1',2':4,5]thieno[2,3-c]quinoline (9CI) (CA INDEX NAME)



RN 95518-81-3 CAPLUS
 CN Naphtho[1',2':4,5]thieno[2,3-c]quinoline, 4-methyl- (9CI) (CA INDEX NAME)



L11 ANSWER 97 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 1985:112619 CAPLUS
 DN 102:112619
 TI Photocyclization of 1,2-diaryl- and photo-bicyclization of
 1,2,6-triarylpyridinium cations
 AU Katritzky, Alan Roy; Agha, Bushra; De Ville, George Z.; Lunt, Edward;
 Knyazhanskii, M. I.; Tymyanski, Ya. R.; Pyshchev, A. I.
 CS Univ. East Anglia, Norwich, UK
 SO Khimiya Geterotsiklicheskikh Soedinenii (1984), (11), 1509-18
 CODEN: KGSSAQ; ISSN: 0453-8234
 DT Journal
 LA Russian
 OS CASREACT 102:112619
 GI

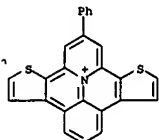


AB The photocyclization of pyridinium salts I (R = Ph, substituted Ph, 4-pyridyl, pyrrol-1-yl, 3-methyl-4-isothiazolyl, pyrazol-4-yl, 2-benzothiazolyl, etc.; R1 = Ph, 4-FC6H4, CO2Et, styryl, 2-pyridyl, 4-tolyl, 2-benzothiazolyl, 2-thienyl, Me; R2 = Ph, 4-FC6H4, CO2Et, CO2-, H; R3 = Ph, 4-FC6H4, 4-tolyl, 2-thienyl) was examined. Thus, I (R = 3-methyl-5-isothiazolyl, R1 = R2 = R3 = Ph) gave II, and I (R = R = Ph, R1 = R3 = 2-thienyl) gave III. The photocyclization proceeded via the excited singlet state with nonadiabatic formation of a dihydro intermediate, which then underwent oxidative dehydrogenation. The structure and quantum yield of the photoproducts were determined by steric and electronic effects of the substituents, and in bichromophoric compds. by singlet-singlet intramol. interfragment energy transfer.
 IT 89494-37-1P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation of)
 RN 89494-37-1 CAPLUS

L11 ANSWER 97 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)
 CN Benzo[*i*]pyrido[2,1,6-*de*]dithieno[3,2-*b*:2',3'-*g*]quinolizinium, 2-phenyl-, perchlorate (9CI) (CA INDEX NAME)

CM 1

CRN 89494-36-0
 CMF C25 H14 N S2

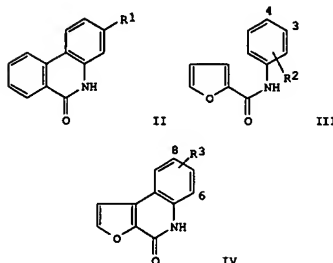


CM 2

CRN 14797-73-0
 CMF Cl O4

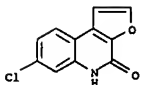


L11 ANSWER 98 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 1984:191713 CAPLUS
 DN 100:191713
 TI Photoinduced reactions. V. Photodehydrocyclization of benzoyl- and 2-furoylchloroanilines
 AU Orlic-Nuber, Mila; Karminski-Zamola, Grace; Fiser-Jakic, Lelja; Jakopcic, Kresimir
 CS Fac. Technol., Univ. Zagreb, Zabreb, YU-41000, Yugoslavia
 SO Glasnik Hemijakog Društva Beograd (1983), 48(7), 409-15
 CODEN: GHDBAX; ISSN: 0017-0941
 DT Journal
 LA English
 CS CASREACT 100:191713
 GI

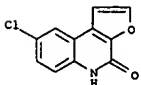


AB Photolysis of BzNHC6H4R (I; R = 3-Cl) in aerated C6H6-EtOH gave phenanthridinone II (R1 = Cl) whereas I (R = 2-Cl) gave III (R1 = H) and I (R = 4-Cl) was stable under the reaction conditions. Similar photolysis of furoylanilines III (R2 = 2-Cl, 3-Cl, 4-Cl) gave furoquinolinones IV (R3 = 6-Cl, 7-Cl, 8-Cl; resp.).
 IT 89972-50-9P 89972-51-0P 89995-65-3P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation of, by photochem. cyclization of chlorofluorylaniline)
 RN 89972-50-9 CAPLUS
 CN Furo[2,3-*c*]quinolin-4(5H)-one, 7-chloro- (9CI) (CA INDEX NAME)

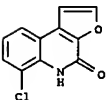
L11 ANSWER 98 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



RN 89972-51-0 CAPLUS
 CN Furo[2,3-*c*]quinolin-4(5H)-one, 8-chloro- (9CI) (CA INDEX NAME)



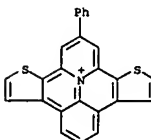
RN 89995-65-3 CAPLUS
 CN Furo[2,3-*c*]quinolin-4(5H)-one, 6-chloro- (9CI) (CA INDEX NAME)



L11 ANSWER 99 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 1984:174146 CAPLUS
 DN 100:174146
 TI Spectroscopic elucidation of pseudo-base formation from benzo[8,9]quinolizino[4,5,6,7-*fed*]phenanthrindylidiums
 AU Katritzky, Alan R.; Agha, Bushra; De Ville, George Z.; Lunt, Edward; Podmore, Michael L.
 CS Sch. Chem. Sci., Univ. East Anglia, Norwich, NR4 7TJ, UK
 SO Organic Magnetic Resonance (1983), 21(11), 649-56
 CODEN: OMRMBD; ISSN: 0030-4921
 DT Journal
 LA English
 AB ¹³C and ¹H NMR and UV are assigned for a variety of substituted and hetero deriva. of benzo[8,9]quinolizino[4,5,6,7-*fed*]phenanthrindylidiums. Large specific effects of traces of H2O on these spectra are traced to pseudo-base formation.
 IT 89494-37-1
 RL: PRP (Properties)
 (proton NMR and UV of)
 RN 89494-37-1 CAPLUS
 CN Benzo[*i*]pyrido[2,1,6-*de*]dithieno[3,2-*b*:2',3'-*g*]quinolizinium, 2-phenyl-, perchlorate (9CI) (CA INDEX NAME)

CM 1

CRN 89494-36-0
 CMF C25 H14 N S2



CM 2

CRN 14797-73-0
 CMF Cl O4

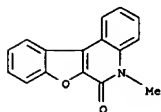


L11 ANSWER 100 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN

AN 1982:85539 CAPLUS
 DN 96:85539
 TI Dihydrobenzofurans
 PA Kaneoka, Yuichi, Japan
 SO Jpn. Kokai Tokkyo Koho, 7 pp.
 CODEN: JKOXAF
 DT Patent
 LA Japanese
 FAN.CNT 1

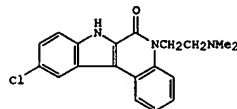
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 56125388	A2	19811001	JP 1980-29570	19800308

C= PRAI JP 1980-29570 A 19800308
 OS CASREACT 96:85539
 GI For diagram(s), see printed CA Issue.
 AB Dihydrobenzofurans I (Z = Q, Q1; R = alkyl) were prepared by photocyclization of benzofurancarboxylic acid anilides. Thus, irradiating II in MeCN with a Hg lamp gave 66% trans-I (Z = Q, R = Me).
 IT 77128-25-7P
 RL: SPN (Synthetic preparation); PREP (Preparation) (preparation of)
 RN 77128-25-7 CAPLUS
 CN Benzo[2,3-c]quinolin-6(5H)-one, 5-methyl- (9CI) (CA INDEX NAME)

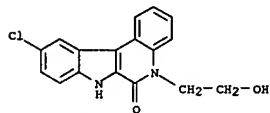


L11 ANSWER 101 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN

AN 1981:202358 CAPLUS
 DN 94:202358
 TI Determination of the anti-tumor agent,
 10-chloro-5-(2-dimethylaminoethyl)-
 7H-indolo[2,3-c]quinolin-6(5H)-one in blood or plasma by high-performance liquid chromatography
 AU Strojny, Norman; D'Arconte, L.; De Silva, J. Arthur F.
 CS Dep. Pharmacokinet. Biopharm., Hoffmann-La Roche, Nutley, NJ, 07110, USA
 SO Journal of Chromatography (1981), 223(1), 111-21
 CODEN: JOCRAM; ISSN: 0021-9673
 DT Journal
 LA English
 GI

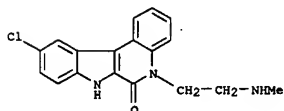


AB A sensitive and specific high-performance liquid chromatog. assay was developed for the determination of the title compound (I) [52865-60-8] in blood or plasma with an overall recovery of 100.3% and a limit of quantitation of 1.0 ng/mL of blood or plasma. The assay was used to determine blood concns. of the drug in the rat following oral administration by intubation of a 1.17-mg dose of I-HCl.
 IT 52865-66-4 52865-72-2 52865-73-3
 52865-78-8 52865-86-8
 RL: ANT (Analyte); ANST (Analytical study) (detection of, in blood by high-performance chromatog.)
 RN 52865-66-4 CAPLUS
 CN 6H-Indolo[2,3-c]quinolin-6-one, 10-chloro-5-(2-hydroxyethyl)- (9CI) (CA INDEX NAME)

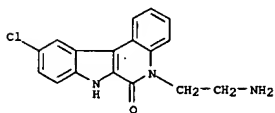


RN 52865-72-2 CAPLUS

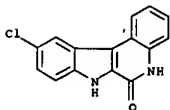
L11 ANSWER 101 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)
 CN 6H-Indolo[2,3-c]quinolin-6-one, 10-chloro-5,7-dihydro-5-[2-(methylamino)ethyl]- (9CI) (CA INDEX NAME)



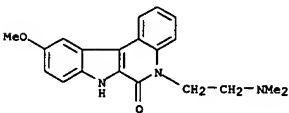
RN 52865-73-3 CAPLUS
 CN 6H-Indolo[2,3-c]quinolin-6-one, 5-(2-aminoethyl)-10-chloro-5,7-dihydro- (9CI) (CA INDEX NAME)



RN 52865-78-8 CAPLUS
 CN 6H-Indolo[2,3-c]quinolin-6-one, 10-chloro-5,7-dihydro- (9CI) (CA INDEX NAME)

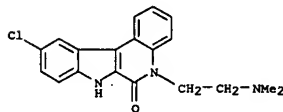


RN 52865-86-8 CAPLUS
 CN 6H-Indolo[2,3-c]quinolin-6-one, 5-[2-(dimethylamino)ethyl]-5,7-dihydro-10-methoxy- (9CI) (CA INDEX NAME)



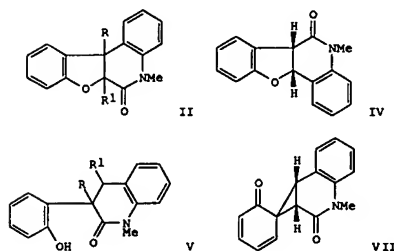
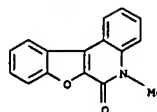
L11 ANSWER 101 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

IT 52865-60-8
 RL: ANT (Analyte); ANST (Analytical study) (determination of, in blood by high-performance chromatog.)
 RN 52865-60-8 CAPLUS
 CN 6H-Indolo[2,3-c]quinolin-6-one, 10-chloro-5-(2-(dimethylamino)ethyl)-5,7-dihydro- (9CI) (CA INDEX NAME)



L11 ANSWER 102 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 1981:156654 CAPLUS
 DN 94:156654
 TI Photochemistry of the amide system: 9. Photocyclization of benzofuran-carboxanilides. Photorearrangement of the benzodihydrofuran system to 3-o-hydroxyphenylquinolones
 AU Kanaoka, Yuichi; San-nohe, Kunio
 CS Fac. Pharm. Sci., Hokkaido Univ., Sapporo, 060, Japan
 SO Tetrahedron Letters (1980), 21(40), 3893-6
 CODEN: TELEAY; ISSN: 0040-4039
 DT Journal
 LA English
 OS CASREACT 94:156654
 GI

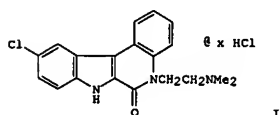
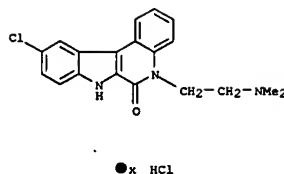
L11 ANSWER 102 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



AB Irradiation of benzofuran-2-carboxy-N-methylanilide (I) in C6H6 gave 50% quinolone II (R = β -H, R1 = α -H) and 7% II (RR1 = bond). Similar irradiation of I in EtOH gave 14% and 4% resp. of the above products, along with 40% II (R = R1 = β -H) (III), 12% quinolone IV, 5% quinolone V (RR1 = bond) (VI) and 19% V (R = H, R1 = OEt). III and IV on further irradiation gave VI. A mechanism involving the cyclopropyl dienone VII is proposed.
 IT 77128-25-72
 RL: SPN (Synthetic preparation); PREP (Preparation) (preparation of)
 RN 77128-25-7 CAPLUS
 CN Benzofuro[2,3-c]quinolin-6(5H)-one, 5-methyl- (9CI) (CA INDEX NAME)

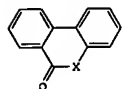
L11 ANSWER 103 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 1979:604389 CAPLUS
 DN 91:204389
 TI Predictive relationship of phagocytic activity to tumor regression in indoloquinolinone derivative-treated mice
 AU Fukushima, Koji; Teller, Morris N.; Mountain, Isabel M.; Tarnowski, George
 CS S.; Stock, C. Chester
 Donald S. Walker Lab., Sloan-Kettering Inst. Cancer Res., Rye, NY, 10580, USA
 SO Journal of the Reticuloendothelial Society (1974-1981) (1979), 26(2), 187-95
 CODEN: JRSODF; ISSN: 0033-6890
 DT Journal
 LA English
 GI

L11 ANSWER 103 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



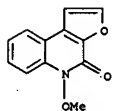
AB The relationship between the degree of stimulation of the reticuloendothelial system (RES) and tumor regression in CD-1 female mice treated orally with 10-chloro-5-[2-(dimethylaminoethyl)-7H-indolo-[2,3-c]-quinolin-6(5H)-one-HCl (I) [71940-06-2] was studied. The rate of clearance of colloidal C (phagocytic index, K) from the blood was measured as an indicator of RES stimulation. Administration of I at a relatively nontoxic dose of 32 mg/kg/day to S180J tumor-bearing mice not only caused a significant increase in phagocytic activity in the early stage of therapy in treated, compared to untreated, tumor-bearing mice, but also induced a significantly high proportion of tumor regressions (39/57). Individuals which eventually became tumor-free tended to have high K values on day 6 and low values on day 42. In contrast, individuals bearing tumors which grew progressively to day 42 tended to have low K values on day 6 and high ones on day 42. The results suggest that a strong, early phagocytic response may serve as a prognostic indicator of the subsequent diminution of tumor size in treated mice.
 IT 71940-06-2
 RL: BIOL (Biological study) (phagocytosis by reticuloendothelial system response to, neoplasia inhibition in relation to)
 RN 71940-06-2 CAPLUS
 CN 6H-Indolo[2,3-c]quinolin-6-one, 10-chloro-5-[2-(dimethylamino)ethyl]-5,7-dihydro-, hydrochloride (9CI) (CA INDEX NAME)

L11 ANSWER 104 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 1979:507776 CAPLUS
 DN 91:107776
 TI Persulfate oxidations. Part 12. Generation and reactions of
 N-methoxy-benzamidylyls and -benzulfonamidylyls
 AU Forrester, Alexander R.; Johansson, Eva M.; Thomson, Ronald H.
 CS Chem. Dep., Univ. Aberdeen, Aberdeen, UK
 SO Journal of the Chemical Society, Perkin Transactions 1: Organic and
 Bio-Organic Chemistry (1972-1999) (1979), (4), 1112-19
 CODEN: JCPRB4; ISSN: 0300-922X
 DT Journal
 LA English
 GI

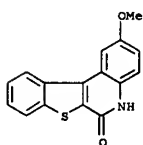


II

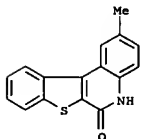
AB A series of N-methoxybiphenyl-2-carboxamidyls and 1 N-methoxybiphenyl-2-sulfonamidyl were generated by oxidation [K2S2O8, Pb(OAc)4, •CMe3] of the corresponding N-methoxy amides. E.g., K2S2O8 oxidation of o-PhC6H4CONHOMe gave o-PhC6H4CON(OMe)• (I). ESR parameters of these radicals were studied. Methoxycarbonyls cyclized onto the adjacent aryl ring to give N-methoxyphenanthridones and/or dimerized to hydrazines which fragmented spontaneously to the Me esters of the corresponding carboxylic acids. E.g., I gave 20% lactam II (X = NOME), 20% o-PhC6H4CO2Me, 18% o-PhC6H4CO[N(OMe)]2COC6H4Ph-o and 2% II (X = O).
 IT 71237-43-9P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation of)
 RN 71237-43-9 CAPLUS
 CN Furo[2,3-c]quinolin-4(5H)-one, 5-methoxy- (9CI) (CA INDEX NAME)



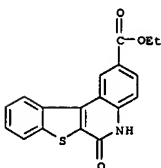
L11 ANSWER 105 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)
 CN [1]Benzothieno[2,3-c]quinolin-6(5H)-one, 2-methoxy- (9CI) (CA INDEX NAME)



RN 70453-76-8 CAPLUS
 CN [1]Benzothieno[2,3-c]quinolin-6(5H)-one, 2-methyl- (9CI) (CA INDEX NAME)

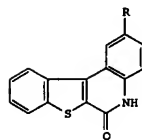


RN 70453-77-9 CAPLUS
 CN [1]Benzothieno[2,3-c]quinoline-2-carboxylic acid, 5,6-dihydro-6-oxo-, ethyl ester (9CI) (CA INDEX NAME)

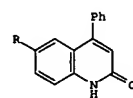


RN 70453-78-0 CAPLUS
 CN [1]Benzothieno[2,3-c]quinolin-6(5H)-one, 2-acetyl- (9CI) (CA INDEX NAME)

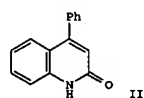
L11 ANSWER 105 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 1979:405089 CAPLUS
 DN 91:5089
 TI A facile synthesis of 4-phenylcarbostyrils and 4-phenylisocarbostyril involving photocyclization of benzo[b]thiophene-2-carboxanilides and 2-benzoylamino-3-chlorobenzo[b]thiophene
 AU Kano, Shinzo; Ozaki, Toshihiko; Hibino, Satoshi
 CS Tokyo Coll. Pharm., Tokyo, 192-03, Japan
 SO Heterocycles (1979), 12(4), 489-92
 CODEN: HETCYM; ISSN: 0385-5414
 DT Journal
 LA English
 OS CASREACT 91:5089
 GI



I

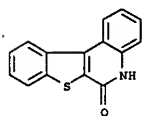


II



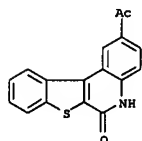
III

AB Photocyclization of 3-chlorobenzo[b]thiophene-2-carboxanilide afforded I, which upon desulfurization gave 4-phenylcarbostyril II (R = H). II (R = MeO, Me, CO2Et, Ac) and III (R = MeO, Me, CO2Et) were also obtained in this manner. This method was applied to the photocyclization of 2-benzoylamino-3-chlorobenzo[b]thiophene.
 IT 57100-47-7P 70453-75-7P 70453-76-8P 70453-77-9P 70453-78-0P 70453-79-1P 70453-80-4P 70453-81-5P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
 (preparation and desulfurization of)
 RN 57100-47-7 CAPLUS
 CN [1]Benzothieno[2,3-c]quinolin-6(5H)-one (9CI) (CA INDEX NAME)

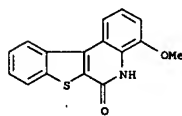


RN 70453-75-7 CAPLUS

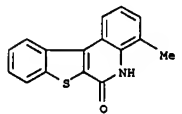
L11 ANSWER 105 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



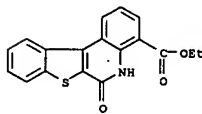
RN 70453-79-1 CAPLUS
 CN [1]Benzothieno[2,3-c]quinolin-6(5H)-one, 4-methoxy- (9CI) (CA INDEX NAME)



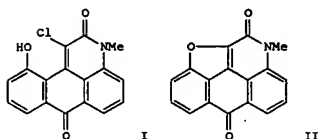
RN 70453-80-4 CAPLUS
 CN [1]Benzothieno[2,3-c]quinolin-6(5H)-one, 4-methyl- (9CI) (CA INDEX NAME)



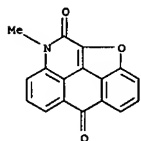
RN 70453-81-5 CAPLUS
 CN [1]Benzothieno[2,3-c]quinoline-4-carboxylic acid, 5,6-dihydro-6-oxo-, ethyl ester (9CI) (CA INDEX NAME)



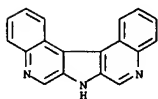
L11 ANSWER 106 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 1979:87320 CAPLUS
 DN 90:87320
 TI Intramolecular cyclization of 1-chloro-3-methyl-11-hydroxyanthrapyridone
 AU Reznichenko, S. V.; Popov, S. I.; Dokunikhin, N. S.
 CS Nauchno-Issled. Inst. Org. Poluprod. Krasitelei, Moscow, USSR
 SO Khimiya Geterotsiklicheskih Soedinenii (1978), (11), 1564
 CODEN: KGSSAQ; ISSN: 0453-8234
 DT Journal
 LA Russian
 OS CASREACT 90:87320
 GI



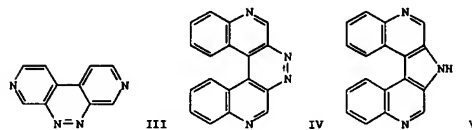
AB Intramol. cyclization of I, prepared in 94% yield by base-catalyzed cyclization of 1-[(chloroacetyl)methylamino]-8-hydroxyanthraquinone, by heating 20 min at 145° in DMF or Me2SO gave 82% furanodibenzoquinolinedione II.
 IT 69268-11-7P
 RL: SPN (Synthetic preparation); PREP (Preparation) (preparation of)
 RN 69268-11-7 CAPLUS
 CN 5H-Benz[3,4]isobenzofuro[1,7,6-cde]quinoline-5,10(9H)-dione, 9-methyl- (9CI) (CA INDEX NAME)



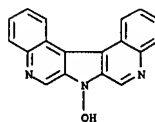
L11 ANSWER 107 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)
 RL: SPN (Synthetic preparation); PREP (Preparation) (prepn. of)
 RN 69112-14-7 CAPLUS
 CN 7H-Pyrrolo[2,3-c:5,4-c']diquinoline (9CI) (CA INDEX NAME)



L11 ANSWER 107 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 1979:72130 CAPLUS
 DN 90:72130
 TI Preparation of ring-fused pyridazines by reduction of 3,3'-dinitro-4,4'-bipyridyl and 3,3'-dinitro-4,4'-biquinolyl
 AU Kanoktanaporn, Santhi; MacBride, J. A. Hugh
 CS Dep. Phys. Sci., Sunderland Polytech., Sunderland, UK
 SO Journal of the Chemical Society, Perkin Transactions 1: Organic and Bio-Organic Chemistry (1972-1999) (1978), (10), 1126-31
 CODEN: JCPRB4; ISSN: 0300-922X
 DT Journal
 LA English
 OS CASREACT 90:72130
 GI

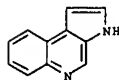


AB Ullman coupling of 4-chloro-3-nitropyridine and -quinoline in amide solvents gave 45% 3,3'-dinitro-4,4'-bipyridyl (I) and 55% 3,3'-dinitro-4,4'-biquinolyl (II), resp., which on reductive ring closure gave fused pyridazines III and IV (5.9 and 79%, resp.) and their mono- and di-N-oxides. Further reduction gave diamines corresponding to I and II. Treating II with hydrazine/NaOH gave an N-hydroxypyrrole by nucleophilic displacement of a nitro group, and further reduction gave diquinolinopyrrole V.
 IT 69112-13-6P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent) (preparation and reduction of)
 RN 69112-13-6 CAPLUS
 CN 7H-Pyrrolo[2,3-c:5,4-c']diquinoline, 7-hydroxy- (9CI) (CA INDEX NAME)



IT 69112-14-7P

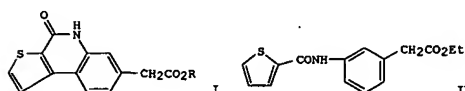
L11 ANSWER 108 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 1979:38727 CAPLUS
 DN 90:38727
 TI Pyrroloquinolines. IV. 3H-pyrrolo[2,3-c]quinolines
 AU Khan, Misbahul Ain; Ferreira da Rocha, Joao
 CS Secao Quim., Inst. Mil. Eng., Rio de Janeiro, Brazil
 SO Heterocycles (1978), 9(11), 1617-29
 CODEN: HETCYM; ISSN: 0385-5414
 DT Journal; General Review
 LA English
 AB A review with 14 refs.
 IT 232-86-0D, derivs.
 RL: RCT (Reactant); RACT (Reactant or reagent)
 RN 232-86-0 CAPLUS
 CN 3H-Pyrrolo[2,3-c]quinoline (7CI, 8CI, 9CI) (CA INDEX NAME)



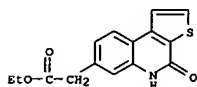
L11 ANSWER 109 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 1978:597518 CAPLUS
 DN 89:197518
 TI 4(5H)-Oxothieno[2,3-c]quinoline-7-acetic acid and its ethyl ester
 IN Ito, Kazuhiko; Maruchi, Tatsuyuki; Tsuruta, Hideki; Komoriya, Keiji
 PA Teijin Ltd., Japan
 SO Jpn. Kokai Tokkyo Koho, 3 pp.
 CODEN: JKOKAF
 DT Patent
 LA Japanese
 FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 53077096	A2	19780708	JP 1976-150714	19761217
JP 1976-150714	A	19761217		

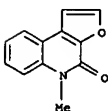
PI JP 53077096
 <--
 PRAI JP 1976-150714
 GI



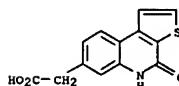
AB Antilucer (no data) I (R = H, Et) were prepared by photochem. cyclization of II and subsequent hydrolysis of the ester. Thus, 2.7 g Et 3-aminophenylacetate in C6H6 containing Et3N, acylated with 2.2 g 2-thenoyl chloride, gave 4.2 g II. II (1.0 g) in 400 mL C6H6 containing 20 mL EtOH was exposed to a 400-W Hg lamp at room temperature 1.5 h to give 100 mg I (R = Et), which was hydrolyzed to I (R = H) with NaOH in aqueous EtOH.
 IT 68165-25-3P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
 (preparation and hydrolysis of)
 RN 68165-25-3 CAPLUS
 CN Thieno[2,3-c]quinoline-7-acetic acid, 4,5-dihydro-4-oxo-, ethyl ester (9CI) (CA INDEX NAME)



L11 ANSWER 110 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 1978:562745 CAPLUS
 DN 89:162745
 TI Photocyclization of heterocyclic acylanilides
 AU Ninomiya, Ichiya; Kiguchi, Toshiko; Naito, Takeaki
 CS Kobe Women's Coll. Pharm., Kobe, Japan
 SO Heterocycles (1978), 9(8), 1023-9
 CODEN: HTCYAM; ISSN: 0385-5414
 DT Journal
 LA English
 OS CASREACT 89:162745
 GI For diagram(s), see printed CA Issue.
 AB The photocyclization products of acylanilides I, II, III, and IV depended on the nature of the heterocycle and on R. I (R = H) gave V under oxidative conditions and a mixture of VI and VII under nonoxidative conditions. The reactions involved the cyclization of the excited anilide to a common intermediate which gave the oxidized and nonoxidized products.
 IT 67735-52-8P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation of)
 RN 67735-52-8 CAPLUS
 CN Furo[2,3-c]quinolin-4(5H)-one, 5-methyl- (9CI) (CA INDEX NAME)



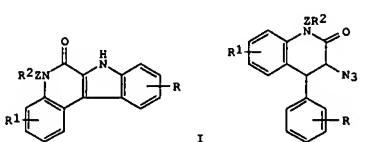
L11 ANSWER 109 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)
 IT 68165-24-2P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation of)
 RN 68165-24-2 CAPLUS
 CN Thieno[2,3-c]quinoline-7-acetic acid, 4,5-dihydro-4-oxo- (9CI) (CA INDEX NAME)



L11 ANSWER 111 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 1978:546890 CAPLUS
 DN 89:146890
 TI 7H-Indolo[2,3-c]quinolin-6(5H)-ones
 IN Fryer, Rodney Ian; Ning, Robert Ye Fong; Sternbach, Leo Henryk; Walsae, Armin
 PA Hoffmann-La Roche, F., und Co. A.-G., Switz.
 SO Patentschrift (Switz.), 6 pp.
 CODEN: SWXXAS
 DT Patent
 LA German
 FAN.CNT 3

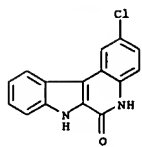
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
CH 602728	A	19780731	CH 1976-6599	19730830
US 3797071	A	19740319	US 1972-292113	19720925
CH 587274	A	19770429	CH 1973-12440	19730830
US 1972-292113	A	19720925		
CH 1973-12440	A	19730830		
US 1972-292193	A	19720925		

PI CH 602728
 <--
 US 3797071
 <--
 CH 587274
 PRAI US 1972-292113
 CH 1973-12440
 US 1972-292193
 GI

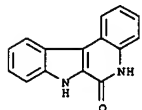


AB The title compds. I [R, R1 = H, CF3, halogen, alkyl, alkoxy, NH2, CN; R2 = (substituted) NH2, OH, alkoxy, acyloxy; Z = alkylene] were prepared by the cyclization of the carbostyrils II. Thus, II (R = R1 = R2 = H) was stirred at 60° with NaH and Me2NCH2CH2Cl in DMF to give I (R = R1 = H, R2 = Me2NCH2CH2). I had antitumor activity in mice at 3.05-3.50 mg/kg/day.
 IT 52865-39-1P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
 (preparation and hydrogenolysis of)
 RN 52865-39-1 CAPLUS
 CN 6H-Indolo[2,3-c]quinolin-6-one, 2-chloro-5,7-dihydro- (9CI) (CA INDEX NAME)

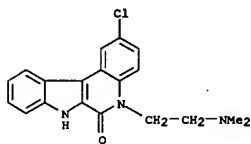
L11 ANSWER 111 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



IT 13220-53-6P 52865-35-7P 52865-36-8P
 52865-37-9P 52865-38-0P 52865-40-4P
 52865-41-5P 52865-54-0P 52865-55-1P
 52918-19-1P
 RL: SPN (Synthetic preparation); PREP (Preparation of)
 (preparation of)
 RN 13220-53-6 CAPLUS
 CN 6H-Indolo[2,3-c]quinolin-6-one, 5,7-dihydro- (8CI, 9CI) (CA INDEX NAME)

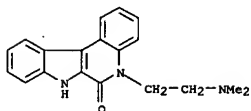


RN 52865-35-7 CAPLUS
 CN 6H-Indolo[2,3-c]quinolin-6-one, 2-chloro-5-[2-(dimethylamino)ethyl]-5,7-dihydro- (9CI) (CA INDEX NAME)

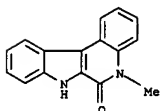


RN 52865-36-8 CAPLUS
 CN 6H-Indolo[2,3-c]quinolin-6-one, 2-chloro-5-[2-(diethylamino)ethyl]-5,7-dihydro- (9CI) (CA INDEX NAME)

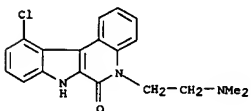
L11 ANSWER 111 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



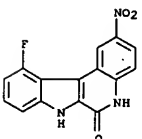
RN 52865-41-5 CAPLUS
 CN 6H-Indolo[2,3-c]quinolin-6-one, 5,7-dihydro-5-methyl- (9CI) (CA INDEX NAME)



RN 52865-54-0 CAPLUS
 CN 6H-Indolo[2,3-c]quinolin-6-one, 11-chloro-5-[2-(dimethylamino)ethyl]-5,7-dihydro- (9CI) (CA INDEX NAME)

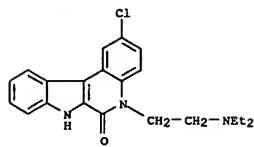


RN 52865-55-1 CAPLUS
 CN 6H-Indolo[2,3-c]quinolin-6-one, 11-fluoro-5,7-dihydro-2-nitro- (9CI) (CA INDEX NAME)

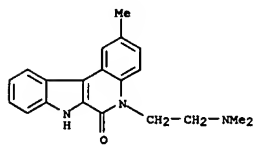


RN 52918-19-1 CAPLUS
 CN 6H-Indolo[2,3-c]quinolin-6-one, 5-[2-(diethylamino)ethyl]-5,7-dihydro-

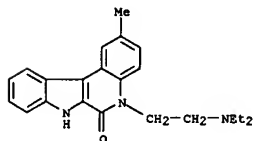
L11 ANSWER 111 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



RN 52865-37-9 CAPLUS
 CN 6H-Indolo[2,3-c]quinolin-6-one, 5-[2-(dimethylamino)ethyl]-5,7-dihydro-2-methyl- (9CI) (CA INDEX NAME)

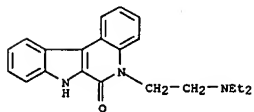


RN 52865-38-0 CAPLUS
 CN 6H-Indolo[2,3-c]quinolin-6-one, 5-[2-(diethylamino)ethyl]-5,7-dihydro-2-methyl- (9CI) (CA INDEX NAME)



RN 52865-40-4 CAPLUS
 CN 6H-Indolo[2,3-c]quinolin-6-one, 5-[2-(dimethylamino)ethyl]-5,7-dihydro- (9CI) (CA INDEX NAME)

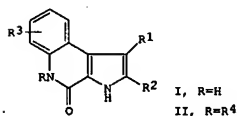
L11 ANSWER 111 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



L11 ANSWER 112 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 1978:170126 CAPLUS
 DN 88:170126
 TI 5-Substituted-3H-pyrrolo[3,2-c]quinolin-4(5H)-ones
 IN Umio, Suminori; Kariyone, Kazuo; Nakamura, Hitoshi
 PA Fujisawa Pharmaceutical Co., Ltd., Japan
 SO Jpn. Tokkyo Koho, 4 pp.
 CODEN: JAXXAD
 DT Patent
 LA Japanese
 FAN CMT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 52046960	B4	19771129	JP 1967-4462	19670123
JP 1967-4462		19670123		

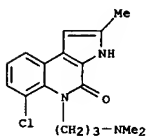
PI
 PRAI
 GRI



AB I (R1 = H, halo; R2 = alkyl; R3 = halo) were treated with R4OH (R4 = arylalkylene or dialkylaminoalkylene) or their deriva. to give I. Thus, 0.5 g I (R1 = H, R2 = Me, R3 = 6-Cl) in DMF was treated with 0.1 g NaH in C6H6 with ice-cooling and then treated with 0.3 g Me2N(CH2)3Cl in C6H6 1

h at 60°, 1 h at 70° and 1 h at 80° to give 0.3 g corresponding II, a central nervous system depressant at 0.1 g/kg in mice.

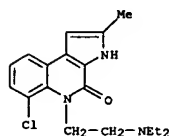
IT 66375-92-6P
 RL: SPN (Synthetic preparation); PREP (Preparation) (preparation and central nervous system depressant activity of)
 RN 66375-92-6 CAPLUS
 CN 4H-Pyrrolo[2,3-c]quinolin-4-one, 6-chloro-5-(3-(dimethylamino)propyl)-3,5-dihydro-2-methyl- (9CI) (CA INDEX NAME)



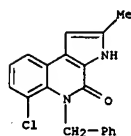
L11 ANSWER 112 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

L11 ANSWER 112 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

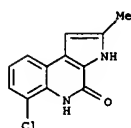
IT 66375-93-7P 66375-94-8P
 RL: SPN (Synthetic preparation); PREP (Preparation) (preparation of)
 RN 66375-93-7 CAPLUS
 CN 4H-Pyrrolo[2,3-c]quinolin-4-one, 6-chloro-5-[2-(diethylamino)ethyl]-3,5-dihydro-2-methyl- (9CI) (CA INDEX NAME)



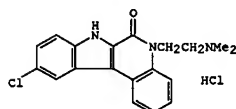
RN 66375-94-8 CAPLUS
 CN 4H-Pyrrolo[2,3-c]quinolin-4-one, 6-chloro-3,5-dihydro-2-methyl-5-(phenylmethyl)- (9CI) (CA INDEX NAME)



IT 32743-38-7
 RL: RCT (Reactant); RACT (Reactant or reagent) (N-alkylation)
 RN 32743-38-7 CAPLUS
 CN 4H-Pyrrolo[2,3-c]quinolin-4-one, 6-chloro-3,5-dihydro-2-methyl- (8CI, 9CI) (CA INDEX NAME)



L11 ANSWER 113 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 1978:99053 CAPLUS
 DN 88:99053
 TI Activity of 10-chloro-5-(2-dimethylaminoethyl)-7H-indolo[2,3-c]quinolin-6(5H)-one hydrochloride against experimental tumors in mice and rats
 AU Grunberg, E.; Kramer, M. J.; Buck, M.; Town, P. W.
 CS Res. Div., Hoffmann-La Roche Inc., Nutley, NJ, USA
 SO Chemotherapy (Basel, Switzerland) (1978), 24(2), 77-80
 CODEN: CHTHBK; ISSN: 0009-3157
 DT Journal
 LA English
 GI



AB 10-Chloro-5-(2-dimethylaminoethyl)-7H-indolo[2,3-c]quinolin-6(5H)-one-HCl (I) (63190-28-3) exerted significant antitumor activity against the Ehrlich carcinoma and sarcoma 180 transplantable tumors in mice by the i.p. or oral (p.o.) routes and when incorporated into diet. A solid tumor

induced in BALB/c mice by s.c. implantation of nonproducer murine sarcoma virus-transformed BALB/3T3 cells was also inhibited by I after i.p. or p.o. treatment but there was no effect against leukemia L1210 ascites or

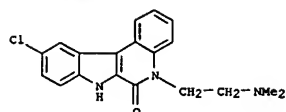
a transplantable murine renal adenocarcinoma. When tested in rats, I significantly reduced the growth of Flexner-Jobling carcinoma, Murphy-Sturm lymphosarcoma, and Walker 256 carcinosarcoma when administered by the i.p. or p.o. routes. Pretreatment, but not posttreatment, with I slightly inhibited the humoral antibody response of mice to sheep red blood cells. I therefore differs from immunosuppressive

agents such as Imuran, methotrexate, cytosine arabinoside, or 6-mercaptopurine, which affect the antibody response of mice to sheep erythrocytes when administered after immunization.

IT 63190-28-3
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (neoplasm inhibitor)

RN 63190-28-3 CAPLUS
 CN 6H-Indolo[2,3-c]quinolin-6-one, 10-chloro-5-(2-(dimethylamino)ethyl)-5,7-dihydro-, monohydrochloride (9CI) (CA INDEX NAME)

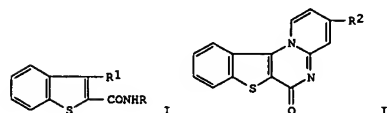
L11 ANSWER 113 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



● HCl

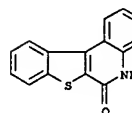
L11 ANSWER 114 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN

AN 1978:62314 CAPLUS
 DN 88:62314
 TI Photochemistry of the amide system. VIII. Photoinduced reactions. XXXIV. Photoacylation. I. Photochemical synthesis of benzothieno[2,3-c][1,4]diazanaphthalene systems by intramolecular dehydrochlorination
 AU Terashima, Masanao; Seki, Kohichi; Itoh, Kazuhiko; Kanaoka, Yuichi
 CS Fac. Pharm. Sci., Higashi Nippon Gakuin Univ., Hokkaido, Japan
 SO Heterocycles (1977), 8, 421-6
 CODEN: HTCYAM; ISSN: 0385-5414
 DT Journal
 LA English
 OS CASREACT 88:62314
 GI



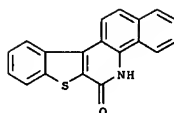
AB Photolysis of benzothienopyridinecarboxamides I (R = Ph, 1-naphthyl, R1 = H, Cl) gave I (RR1 = o-C6H4, 1,2-naphthalenediyl). I (R = 2-pyridyl, 4-methyl-2-pyridyl, R1 = Cl) similarly gave I (RR1 = 2,3-pyridinediyl, 4-methyl-2,3-pyridinediyl) and II (R2 = H, Me). Photolysis of I (R = 3-pyridyl, R1 = Cl) gave I (RR1 = 3,4-pyridinediyl, 3,2-pyridinediyl), whereas I (R = 4-methyl-3-pyridyl, R1 = Cl) gave I (RR1 = 4-methyl-3,2-pyridinediyl). I (R = 4-pyridyl, R1 = Cl) cyclized to I (RR1 = 4,3-pyridinediyl).

IT 57100-47-7F 65469-37-6P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation of)
 RN 57100-47-7 CAPLUS
 CN [1]Benzothieno[2,3-c]quinolin-6(5H)-one (9CI) (CA INDEX NAME)



RN 65469-37-6 CAPLUS
 CN Benzo[h][1]benzothieno[2,3-c]quinolin-6(5H)-one (9CI) (CA INDEX NAME)

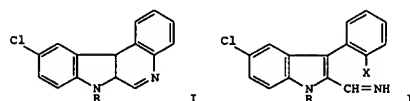
L11 ANSWER 114 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



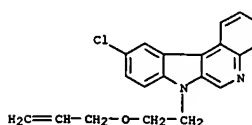
L11 ANSWER 115 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN

AN 1978:22874 CAPLUS
 DN 88:22874
 TI Indoloquinoline derivatives
 IN Matsuura, Akira; Akatsu, Mitsuhiro; Sunagawa, Makoto; Ishizumi, Kikuo; Katsube, Junki
 PA Sumitomo Chemical Co., Ltd., Japan
 SO Jpn. Kokai Tokkyo Koho, 3 pp.
 CODEN: JKKXAF
 DT Patent
 LA Japanese
 PAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 52091893	A2	19770802	JP 1976-6921	19760123
<--					
PRAI	JP 1976-6921	A	19760123		
GI					



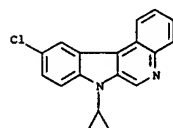
AB Five title derivs. I (R = H2C:CHCH2OCH2CH2, cyclopropylmethyl, Et2NCH2CH2, Me, EtSCH2CH2) were prepared by condensation-cyclization of II (X = halo) in the presence of bases. I had anticancer activity (no data). Thus, 1 g 1-(β-allyloxyethyl)-2-cyano-3-(2-fluorophenyl)-5-chloroindole in PhMe was added to 0.98 g 70% NaAlH2(OCH2CH2OMe)2/PhMe in PhMe with cooling and the mixture refluxed 5 h to give II (R = H2C:CHCH2OCH2CH2, X = F), which was refluxed with 0.1 g NaH 7 h to give I (R = H2C:CHCH2OCH2CH2).
 IT 64840-62-6P 64840-63-7P 64840-64-8P
 64840-65-9P 64840-66-0P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation of)
 RN 64840-62-6 CAPLUS
 CN 7H-Indolo[2,3-c]quinoline, 10-chloro-7-[2-(2-propenyloxy)ethyl]- (9CI) (CA INDEX NAME)



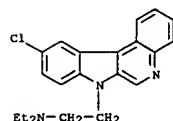
H2C=CH-CH2-O-CH2-CH2

RN 64840-63-7 CAPLUS

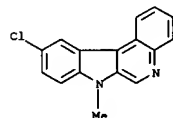
L11 ANSWER 115 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)
 CN 7H-Indolo[2,3-c]quinoline, 10-chloro-7-cyclopropyl- (9CI) (CA INDEX NAME)



RN 64840-64-8 CAPLUS
 CN 7H-Indolo[2,3-c]quinoline-7-ethanamine, 10-chloro-N,N-diethyl- (9CI) (CA INDEX NAME)

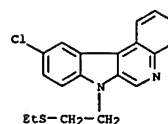


RN 64840-65-9 CAPLUS
 CN 7H-Indolo[2,3-c]quinoline, 10-chloro-7-methyl- (9CI) (CA INDEX NAME)



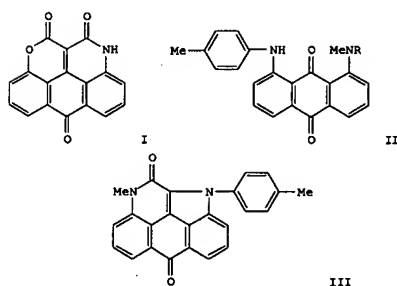
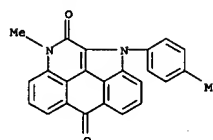
RN 64840-66-0 CAPLUS
 CN 7H-Indolo[2,3-c]quinoline, 10-chloro-7-[2-(ethylthio)ethyl]- (9CI) (CA INDEX NAME)

L11 ANSWER 115 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



L11 ANSWER 116 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN
 RN 1977:484861 CAPLUS
 DN 87:84861
 TI New examples of 1,9,8-condensations of 1,8-disubstituted derivatives of anthraquinone
 AU Reznichenko, S. V.; Popov, S. I.; Dokunikhin, N. S.
 CS Nauchno-Issled. Inst. Org. Poluprod. Krasitelei, Moscow, USSR
 SO Zhurnal Organicheskoi Khimii (1977), 13(5), 1126-7
 CODEN: ZORKAE; ISSN: 0514-7492
 DT Journal
 LA Russian
 OS CASREACT 87:84861
 GI

L11 ANSWER 116 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

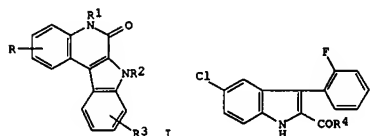


AB Cyclocondensation of 1-amino-8-hydroxyanthraquinone with $\text{CH}_2(\text{CO}_2\text{Et})_2$ gave 82% I. Acylation of II (R = H), prepared from chloro(methylamino)anthraquinone by amination with p-MeC₆H₄NH₂, gave 98.5% II (R = ClCH₂CO) which was cyclized in Me₂SO containing NaOH to give 56% III.
 IT 63572-79-2P
 RL: SPN (Synthetic preparation); PREP (Preparation) (preparation of)
 RN 63572-79-2 CAPLUS
 CN Benz[3,4]isoindolo[1,7,6-cde]quinoline-5,10-dione, 1,9-dihydro-9-methyl-1-(4-methylphenyl)- (9CI) (CA INDEX NAME)

L11 ANSWER 117 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 1977:439450 CAPLUS
 DN 87:39450
 TI Indoloquinolines and intermediates
 IN Fryer, Rodney Ian; Ning, Robert Ye-Fong; Sternbach, Leo Henryk; Walser, Armin
 PA Hoffmann-La Roche, Inc., USA
 SO U.S., 26 pp.
 CODEN: USXXAM
 DT Patent
 LA English
 FAN CNF 3

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI US 4014883	A	19770329	US 1975-596684	19750716
<-- CA 1012147	A1	19770614	CA 1973-181739	19730924
<-- FI 7400884	A	19750311	FI 1974-884	19740322
<-- NO 7401039	A	19750311	NO 1974-1039	19740322
<-- SE 7403950	A	19750311	SE 1974-3950	19740322
PRAI US 1972-292193	A2	19720925		
US 1973-395871	A1	19730910		

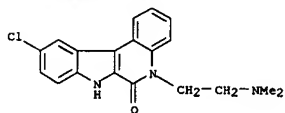
GI



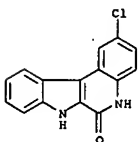
AB Indoloquinolones I (R = H, 2-NO₂, 2-Cl, 2-Me, 3-(2-FC₆H₄), R₁, R₂ = H, alkyl, aminoalkyl, R₃ = H, 11-Cl, 10-Br, 10-Cl, 10-OMe, 10-F, 10-NO₂, 8-Cl) were prepared. Thus, 2-FC₆H₄CH₂CH₂CO₂Et was condensed with 4-ClC₆H₄N₂Cl, the indolecarboxylate II (R₄ = OEt) hydrolyzed and aminated, II (R₄ = NHCH₂CH₂NMe₂) cyclized with base to give I (R = R₂ = H, R₁ = CH₂CH₂NMe₂, R₃ = 10-Cl). This compound had antitumor activity at 100 mg/kg day for 8 days orally or i.p. in mice.

IT 63190-21-6
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (aminoalkylation of)
 RN 63190-21-6 CAPLUS
 CN 7H-Indolo[2,3-c]quinoline, 6,10-dichloro- (9CI) (CA INDEX NAME)

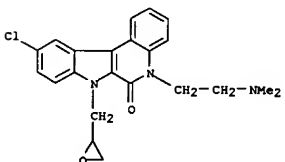
L11 ANSWER 117 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



IT 52865-39-1P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
 (preparation and hydrogenolysis of)
 RN 52865-39-1 CAPLUS
 CN 6H-Indolo[2,3-c]quinolin-6-one, 2-chloro-5,7-dihydro- (9CI) (CA INDEX NAME)

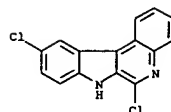


IT 63190-24-9P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
 (preparation and hydrolysis of)
 RN 63190-24-9 CAPLUS
 CN 6H-Indolo[2,3-c]quinolin-6-one, 10-chloro-5-[2-(dimethylamino)ethyl]-5,7-dihydro-7-(oxiranylmethyl)- (9CI) (CA INDEX NAME)

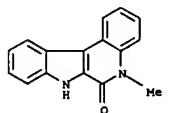


IT 52865-79-9P 63220-28-0P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
 (preparation and methylation of)
 RN 52865-79-9 CAPLUS
 CN 6H-Indolo[2,3-c]quinolin-6-one, 10-chloro-7-[2-(dimethylamino)ethyl]-5,7-

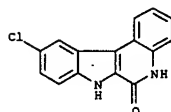
L11 ANSWER 117 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



IT 52865-41-5P 52865-78-8P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
 (preparation and aminoalkylation of)
 RN 52865-41-5 CAPLUS
 CN 6H-Indolo[2,3-c]quinolin-6-one, 5,7-dihydro-5-methyl- (9CI) (CA INDEX NAME)

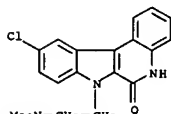


RN 52865-78-8 CAPLUS
 CN 6H-Indolo[2,3-c]quinolin-6-one, 10-chloro-5,7-dihydro- (9CI) (CA INDEX NAME)

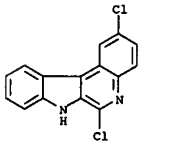


IT 52865-60-8P
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)
 (preparation and antitumor activity of)
 RN 52865-60-8 CAPLUS
 CN 6H-Indolo[2,3-c]quinolin-6-one, 10-chloro-5-[2-(dimethylamino)ethyl]-5,7-dihydro- (9CI) (CA INDEX NAME)

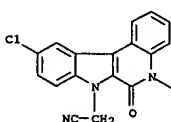
L11 ANSWER 117 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



RN 63220-28-0 CAPLUS
 CN 7H-Indolo[2,3-c]quinoline, 2,6-dichloro- (9CI) (CA INDEX NAME)

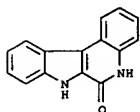


IT 52865-68-6P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
 (preparation and reduction of)
 RN 52865-68-6 CAPLUS
 CN 7H-Indolo[2,3-c]quinolin-7-acetonitrile, 10-chloro-5,6-dihydro-5-methyl-6-oxo- (9CI) (CA INDEX NAME)

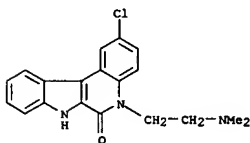


IT 13220-53-6P 52865-35-7P 52865-36-8P
 52865-37-9P 52865-38-0P 52865-40-4P
 52865-42-6P 52865-43-7P 52865-44-8P
 52865-45-9P 52865-52-8P 52865-53-9P
 52865-54-0P 52865-55-1P 52865-56-2P
 52865-57-3P 52865-61-9P 52865-62-0P
 52865-64-2P 52865-65-3P 52865-66-4P
 52865-67-5P 52865-69-7P 52865-70-0P
 52865-72-2P 52865-73-3P 52865-74-4P

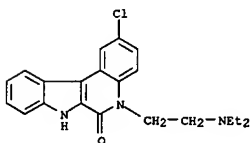
L11 ANSWER 117 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)
 52865-75-5P 52865-76-6P 52865-77-7P
 52865-80-2P 52865-81-3P 52865-82-4P
 52865-83-5P 52865-84-6P 52865-85-7P
 52865-86-8P 52918-19-1P 63190-13-6P
 63190-17-0P 63190-19-2P 63190-22-7P
 63190-23-8P 63190-25-0P 63190-28-3P
 63220-29-1P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (prepn. of)
 RN 13220-53-6 CAPLUS
 CN 6H-Indolo[2,3-c]quinolin-6-one, 5,7-dihydro- (8CI, 9CI) (CA INDEX NAME)



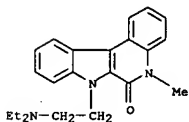
RN 52865-35-7 CAPLUS
 CN 6H-Indolo[2,3-c]quinolin-6-one, 2-chloro-5-[2-(dimethylamino)ethyl]-5,7-dihydro- (9CI) (CA INDEX NAME)



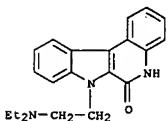
RN 52865-36-8 CAPLUS
 CN 6H-Indolo[2,3-c]quinolin-6-one, 2-chloro-5-[2-(diethylamino)ethyl]-5,7-dihydro- (9CI) (CA INDEX NAME)



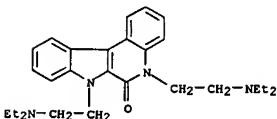
L11 ANSWER 117 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



RN 52865-43-7 CAPLUS
 CN 6H-Indolo[2,3-c]quinolin-6-one, 7-[2-(diethylamino)ethyl]-5,7-dihydro- (9CI) (CA INDEX NAME)



RN 52865-44-8 CAPLUS
 CN 6H-Indolo[2,3-c]quinolin-6-one, 5,7-bis[2-(diethylamino)ethyl]-5,7-dihydro-, dihydrochloride (9CI) (CA INDEX NAME)

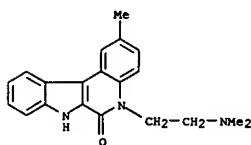


● 2 HCl

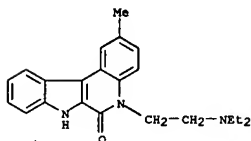
RN 52865-45-9 CAPLUS
 CN 6H-Indolo[2,3-c]quinolin-6-one, 7-[2-(dimethylamino)ethyl]-5,7-dihydro- (9CI) (CA INDEX NAME)

L11 ANSWER 117 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

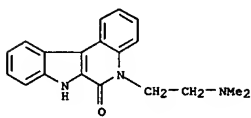
RN 52865-37-9 CAPLUS
 CN 6H-Indolo[2,3-c]quinolin-6-one, 5-[2-(dimethylamino)ethyl]-5,7-dihydro-2-methyl- (9CI) (CA INDEX NAME)



RN 52865-38-0 CAPLUS
 CN 6H-Indolo[2,3-c]quinolin-6-one, 5-[2-(diethylamino)ethyl]-5,7-dihydro-2-methyl- (9CI) (CA INDEX NAME)



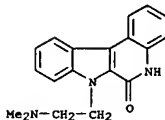
RN 52865-40-4 CAPLUS
 CN 6H-Indolo[2,3-c]quinolin-6-one, 5-[2-(dimethylamino)ethyl]-5,7-dihydro- (9CI) (CA INDEX NAME)



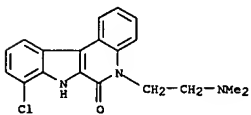
RN 52865-42-6 CAPLUS
 CN 6H-Indolo[2,3-c]quinolin-6-one, 7-[2-(diethylamino)ethyl]-5,7-dihydro-5-methyl- (9CI) (CA INDEX NAME)



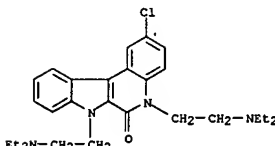
L11 ANSWER 117 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



RN 52865-52-8 CAPLUS
 CN 6H-Indolo[2,3-c]quinolin-6-one, 8-chloro-5-[2-(dimethylamino)ethyl]-5,7-dihydro- (9CI) (CA INDEX NAME)



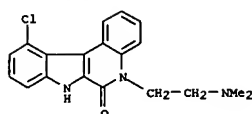
RN 52865-53-9 CAPLUS
 CN 6H-Indolo[2,3-c]quinolin-6-one, 2-chloro-5,7-bis[2-(diethylamino)ethyl]-5,7-dihydro-, dihydrochloride (9CI) (CA INDEX NAME)



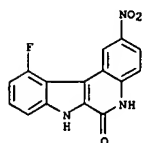
● 2 HCl

RN 52865-54-0 CAPLUS
 CN 6H-Indolo[2,3-c]quinolin-6-one, 11-chloro-5-[2-(dimethylamino)ethyl]-5,7-dihydro- (9CI) (CA INDEX NAME)

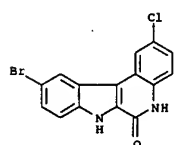
L11 ANSWER 117 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



RN 52865-55-1 CAPLUS
CN 6H-Indolo[2,3-c]quinolin-6-one, 11-fluoro-5,7-dihydro-2-nitro- (9CI) (CA INDEX NAME)

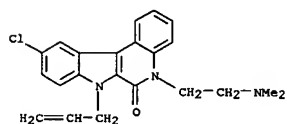


RN 52865-56-2 CAPLUS
CN 6H-Indolo[2,3-c]quinolin-6-one, 10-bromo-2-chloro-5,7-dihydro- (9CI) (CA INDEX NAME)

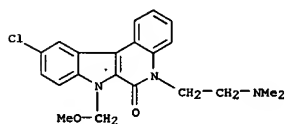


RN 52865-57-3 CAPLUS
CN 6H-Indolo[2,3-c]quinolin-6-one, 10-bromo-2-chloro-5-[2-(diethylamino)ethyl]-7-dihydro-, monohydrobromide (9CI) (CA INDEX NAME)

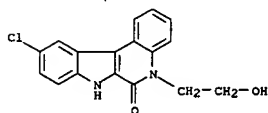
L11 ANSWER 117 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



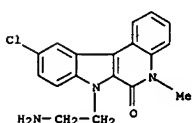
RN 52865-65-3 CAPLUS
CN 6H-Indolo[2,3-c]quinolin-6-one, 10-chloro-5-[2-(dimethylamino)ethyl]-5,7-dihydro-7-(methoxymethyl)- (9CI) (CA INDEX NAME)



RN 52865-66-4 CAPLUS
CN 6H-Indolo[2,3-c]quinolin-6-one, 10-chloro-5,7-dihydro-5-(2-hydroxyethyl)- (9CI) (CA INDEX NAME)

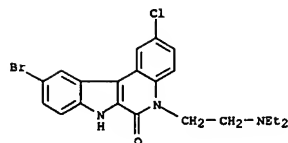


RN 52865-67-5 CAPLUS
CN 6H-Indolo[2,3-c]quinolin-6-one, 7-(2-aminoethyl)-10-chloro-5,7-dihydro-5-methyl- (9CI) (CA INDEX NAME)



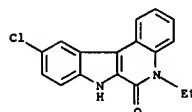
RN 52865-69-7 CAPLUS

L11 ANSWER 117 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

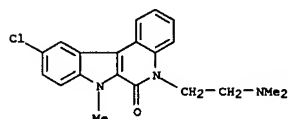


● HBr

RN 52865-61-9 CAPLUS
CN 6H-Indolo[2,3-c]quinolin-6-one, 10-chloro-5-ethyl-5,7-dihydro- (9CI) (CA INDEX NAME)

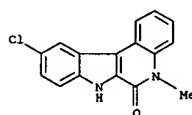


RN 52865-62-0 CAPLUS
CN 6H-Indolo[2,3-c]quinolin-6-one, 10-chloro-5-[2-(dimethylamino)ethyl]-5,7-dihydro-7-methyl- (9CI) (CA INDEX NAME)

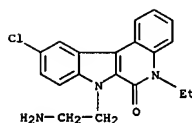


RN 52865-64-2 CAPLUS
CN 6H-Indolo[2,3-c]quinolin-6-one, 10-chloro-5-[2-(dimethylamino)ethyl]-5,7-dihydro-7-(2-propenyl)- (9CI) (CA INDEX NAME)

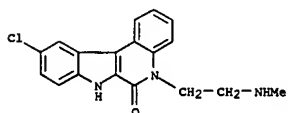
L11 ANSWER 117 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)
CN 6H-Indolo[2,3-c]quinolin-6-one, 10-chloro-5,7-dihydro-5-methyl- (9CI) (CA INDEX NAME)



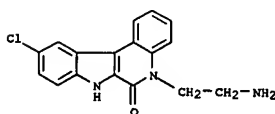
RN 52865-70-0 CAPLUS
CN 6H-Indolo[2,3-c]quinolin-6-one, 7-(2-aminoethyl)-10-chloro-5-ethyl-5,7-dihydro- (9CI) (CA INDEX NAME)



RN 52865-72-2 CAPLUS
CN 6H-Indolo[2,3-c]quinolin-6-one, 10-chloro-5,7-dihydro-5-[2-(methylamino)ethyl]- (9CI) (CA INDEX NAME)

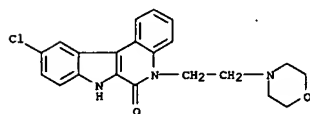


RN 52865-73-3 CAPLUS
CN 6H-Indolo[2,3-c]quinolin-6-one, 5-(2-aminoethyl)-10-chloro-5,7-dihydro- (9CI) (CA INDEX NAME)

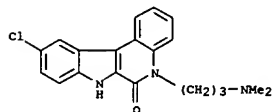


L11 ANSWER 117 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

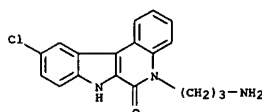
RN 52865-74-4 CAPLUS
 CN 6H-Indolo[2,3-c]quinolin-6-one, 10-chloro-5,7-dihydro-5-[2-(4-morpholinyl)ethyl]- (9CI) (CA INDEX NAME)



RN 52865-75-5 CAPLUS
 CN 6H-Indolo[2,3-c]quinolin-6-one, 10-chloro-5-[3-(dimethylamino)propyl]-5,7-dihydro- (9CI) (CA INDEX NAME)

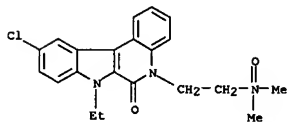


RN 52865-76-6 CAPLUS
 CN 6H-Indolo[2,3-c]quinolin-6-one, 5-(3-aminopropyl)-10-chloro-5,7-dihydro- (9CI) (CA INDEX NAME)

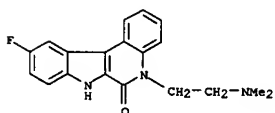


RN 52865-77-7 CAPLUS
 CN 6H-Indolo[2,3-c]quinolin-6-one, 10-chloro-5,7-dihydro-5-[3-(4-morpholinyl)propyl]- (9CI) (CA INDEX NAME)

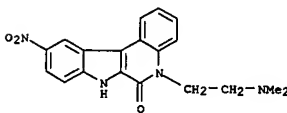
L11 ANSWER 117 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



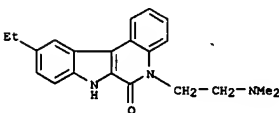
RN 52865-83-5 CAPLUS
 CN 6H-Indolo[2,3-c]quinolin-6-one, 5-[2-(dimethylamino)ethyl]-10-fluoro-5,7-dihydro- (9CI) (CA INDEX NAME)



RN 52865-84-6 CAPLUS
 CN 6H-Indolo[2,3-c]quinolin-6-one, 5-[2-(dimethylamino)ethyl]-10-ethyl-5,7-dihydro-10-nitro- (9CI) (CA INDEX NAME)

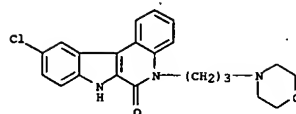


RN 52865-85-7 CAPLUS
 CN 6H-Indolo[2,3-c]quinolin-6-one, 5-[2-(dimethylamino)ethyl]-10-ethyl-5,7-dihydro- (9CI) (CA INDEX NAME)

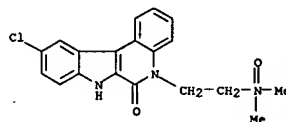


RN 52865-86-8 CAPLUS
 CN 6H-Indolo[2,3-c]quinolin-6-one, 5-[2-(dimethylamino)ethyl]-5,7-dihydro-10-

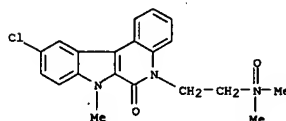
L11 ANSWER 117 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



RN 52865-80-2 CAPLUS
 CN 6H-Indolo[2,3-c]quinolin-6-one, 10-chloro-5-[2-(dimethyloxidoamino)ethyl]-5,7-dihydro- (9CI) (CA INDEX NAME)

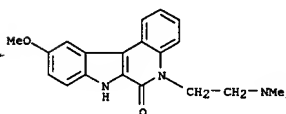


RN 52865-81-3 CAPLUS
 CN 6H-Indolo[2,3-c]quinolin-6-one, 10-chloro-5-[2-(dimethyloxidoamino)ethyl]-5,7-dihydro-7-methyl- (9CI) (CA INDEX NAME)

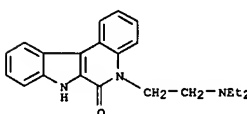


RN 52865-82-4 CAPLUS
 CN 6H-Indolo[2,3-c]quinolin-6-one, 10-chloro-5-[2-(dimethyloxidoamino)ethyl]-7-ethyl-5,7-dihydro- (9CI) (CA INDEX NAME)

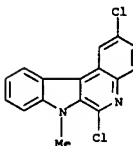
L11 ANSWER 117 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



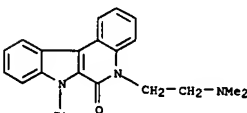
RN 52918-19-1 CAPLUS
 CN 6H-Indolo[2,3-c]quinolin-6-one, 5-[2-(diethylamino)ethyl]-5,7-dihydro- (9CI) (CA INDEX NAME)



RN 63190-13-6 CAPLUS
 CN 7H-Indolo[2,3-c]quinoline, 2,6-dichloro-7-methyl- (9CI) (CA INDEX NAME)

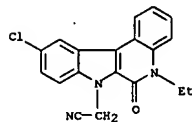


RN 63190-17-0 CAPLUS
 CN 6H-Indolo[2,3-c]quinolin-6-one, 5-[2-(dimethylamino)ethyl]-7-ethyl-5,7-dihydro- (9CI) (CA INDEX NAME)

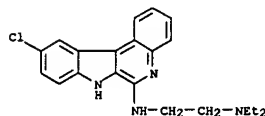


RN 63190-19-2 CAPLUS

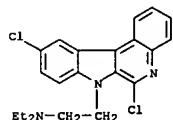
L11 ANSWER 117 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)
 CN 7H-Indolo[2,3-c]quinoline-7-acetonitrile,
 10-chloro-5-ethyl-5,6-dihydro-6-
 oxo- (9CI) (CA INDEX NAME)



RN 63190-22-7 CAPLUS
 CN 1,2-Ethanediamine, N'-(10-chloro-7H-indolo[2,3-c]quinolin-6-yl)-N,N-diethyl- (9CI) (CA INDEX NAME)

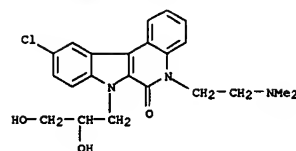


RN 63190-23-8 CAPLUS
 CN 7H-Indolo[2,3-c]quinoline-7-ethanamine, 6,10-dichloro-N,N-diethyl- (9CI)
 (CA INDEX NAME)

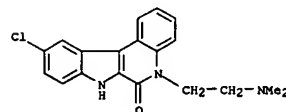


RN 63190-25-0 CAPLUS
 CN 6H-Indolo[2,3-c]quinolin-6-one, 10-chloro-7-(2,3-dihydroxypropyl)-5-[2-(dimethylamino)ethyl]-5,7-dihydro- (9CI) (CA INDEX NAME)

L11 ANSWER 117 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

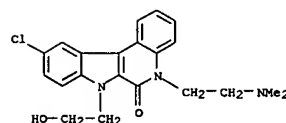


RN 63190-28-3 CAPLUS
 CN 6H-Indolo[2,3-c]quinolin-6-one, 10-chloro-5-[2-(dimethylamino)ethyl]-5,7-dihydro-, monohydrochloride (9CI) (CA INDEX NAME)

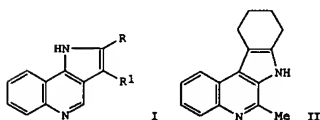


• HCl

RN 63220-29-1 CAPLUS
 CN 6H-Indolo[2,3-c]quinolin-6-one, 10-chloro-5-[2-(dimethylamino)ethyl]-5,7-dihydro-7-(2-hydroxyethyl)- (9CI) (CA INDEX NAME)



L11 ANSWER 118 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 1977:72486 CAPLUS
 DN 86:72486
 TI Convenient routes to pyrrolo[3,2-b]-, pyrrolo[3,2-c]-, and pyrrolo[2,3-c]quinolines, and a study of the pyrolysis of 2-quinolylhydrazones
 AU Farrick, John; Wilcox, Russell
 CS Sch. Chem., Brunel Univ., Uxbridge, UK
 SO Journal of the Chemical Society, Perkin Transactions 1: Organic and Bio-Organic Chemistry (1972-1999) (1976), (19), 2121-5
 CODEN: JCPRB4; ISSN: 0300-922X
 DT Journal
 LA English
 GI

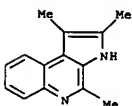


AB 3-Amino-2-methylquinoline with HC(OEt)3 and an acid catalyst gave 63% 1H-pyrrolo[3,2-b]quinoline. The substituted pyrrolo[3,2-c]quinolines I
 [R = R1 = Me, Ph; RR1 = (CH2)3, (CH2)4] were prepared (70-82%) by refluxing the

corresponding 4-quinolylhydrazones in diethylene glycol for 2-7 hr. 3-Hydrazino-2-methylquinoline and a large excess of cyclohexanone with AcOH on heating gave the pyrrolo[2,3-c]quinoline II. Pyrolysis of deoxybenzoin 2-quinolylhydrazone in dry diethylene glycol gave 2-aminoquinoline, 2,3-diphenylimidazo[1,2-a]quinoline (III), and 2,3,4,5-tetraphenylpyrrole. Similar pyrolysis of butan-2-one 2-quinolylhydrazone gave 2-aminoquinoline, 2,2'-azoquinoline (IV), and an aminodiquinolylamine (V). III may be formed by a radical process whereas IV and V may be formed by dimerization of the aminoquinoline and subsequent oxidation or rearrangement.

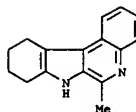
IT 61760-51-8P 61760-52-9P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation of)

RN 61760-51-9 CAPLUS
 CN 3H-Pyrrolo[2,3-c]quinoline, 1,2,4-trimethyl- (9CI) (CA INDEX NAME)



RN 61760-52-9 CAPLUS
 CN 7H-Indolo[2,3-c]quinoline, 8,9,10,11-tetrahydro-6-methyl- (9CI) (CA INDEX NAME)

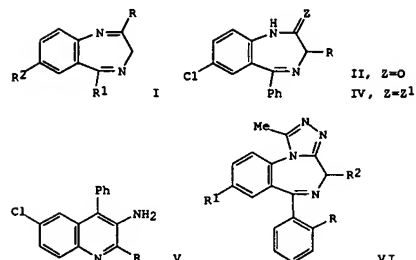
L11 ANSWER 118 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)
 NAME)



L11 ANSWER 119 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 1976:433094 CAPLUS
 DN 85:33094
 TI Heterocyclic compounds
 IN Ning, Robert Y.; Madan, Pradeep B.
 PA Hoffmann-La Roche, F., und Co., A.-G., Switz.
 SO Ger. Offen., 54 pp.
 CODEN: GWXKEX
 DT Patent
 LA German
 FAN. CNT 5

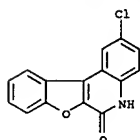
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI DE 2540586	A1	19760325	DE 1975-2540586	19750911
<-- CH 603655	A	19780831	CH 1974-14048	19741021
<-- CH 619715	A	19801015	CH 1975-11409	19750903
<-- NL 7510621	A	19760315	NL 1975-10621	19750909
<-- JP 51054546	A2	19760513	JP 1975-109061	19750910
<-- AT 347469	B	19781227	AT 1975-6976	19750910
<-- AT 7903787	A	19850315	AT 1979-3787	19790523
<-- AT 378959	B	19851025		
<-- AT 7903788	A	19850315	AT 1979-3788	19790523
<-- AT 378960	B	19851025		
<-- AU 530519	B2	19830721	AU 1979-51283	19790927
<-- AU 7951283	A1	19800320		
<-- CH 623325	A	19810529	CH 1980-95	19800108
<-- FI 8001762	A	19800530	FI 1980-1762	19800530
<-- FI 66384	B	19840629		
<-- FI 66384	C	19841010		
<-- FI 8001763	A	19800530	FI 1980-1763	19800530
<-- FI 8001764	A	19800530	FI 1980-1764	19800530
<-- CH 628053	A	19820215	CH 1981-1337	19810227
<-- US 4440685	A	19840403	US 1983-504999	19830616
<-- US 4739049	A	19880419	US 1986-897456	19860815
PRAI US 1974-504924	A	19740911		
CH 1974-14048	A	19741021		
US 1975-574653	A	19750506		
US 1975-602691	A2	19750807		
CH 1975-11410	A	19750903		
CH 1975-9580	A	19750903		
FI 1975-2517	A	19750908		

L11 ANSWER 119 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)
 AT 1975-6977 A 19750910
 AU 1975-84704 A 19750910
 US 1976-663660 A1 19760304
 US 1977-758728 A1 19770112
 US 1978-905820 A3 19780515
 US 1978-966528 A1 19781204
 US 1981-243091 A1 19810312
 US 1982-395931 A1 19820707
 US 1985-715149 A1 19850322
 OS CASREACT 85:33094
 GI

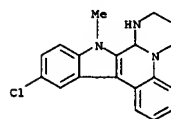


AB Benzodiazepines I (R = NHMe, MeO, OCH2CH2OH, NHNHC(=O)Me; R1 = Ph, NHMe; R2 = Cl) (6 compds.) were prepared by 4 methods, e.g., benzodiazepinone II was treated with dimorpholinophosphinic chloride to give I (R = dimorpholinophosphinyloxy, R1 = Ph, R2 = Cl) (III) which gave I (R = NHMe) on reaction with MeNH2. III with MeNO2 or CH2(CO2Me)2 gave IV (Z1 = CHNO2, CH(CO2Me)2; R = H). Similarly prepared were the 5-o-FC6H4 analogs of IV (Z1 = CHNO2, R = H, Me). Also prepared were quinolines V (R = dimorpholinophosphinyloxy) and MeS). III or its analogs and AcNHNH2 gave VI (R = H, Cl, F, R1 = Cl; R = F, R1 = Et 5-oxide; R2 = H; R = F, R1 = Cl, R2 = Me (+)). I, V, and VI, including the intermediary phosphinyloxy analogs, are useful as sedatives, muscle relaxants, and anticonvulsants (no data).
 IT 57046-67-0P
 RL: SPN (Synthetic preparation); PREP (Preparation) (preparation of)
 RN 57046-67-0 CAPLUS
 CN Benzofuro[2,3-c]quinolin-6(5H)-one, 2-chloro- (9CI) (CA INDEX NAME)

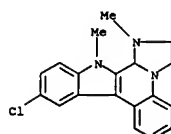
L11 ANSWER 119 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



L11 ANSWER 120 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 1975:593122 CAPLUS
 DN 83:193122
 TI Nucleophilic displacement of aromatic fluorine. III. Indoloquinolines and benzofuranquinolines
 AU Walser, Armin; Silverman, Gladys; Flynn, Thomas; Fryer, R. Ian
 CS Hoffman-LaRoche Inc., Nutley, NJ, USA
 SO Journal of Heterocyclic Chemistry (1975), 12(2), 351-8
 CODEN: JHTCAD; ISSN: 0022-152X
 DT Journal
 LA English
 OS CASREACT 83:193122
 GI For diagram(s), see printed CA Issue.
 AB Several indoloquinoline, benzofuranquinoline, and indolobenzazepine derivs., e.g. I-IV were prepared by intramolecular nucleophilic displacement of fluorine. Thus V (R = OEt) was aminated to give V (R = NH2), which was treated with NaH to give I.
 IT 57046-57-8P 57046-58-9P 57046-60-3P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent) (preparation and dehydrogenation of)
 RN 57046-57-8 CAPLUS
 CN Indolo[2,3-c]pyrimido[1,2-a]quinoline, 11-chloro-1,2,3,4,14,14b-hexahydro-14-methyl- (9CI) (CA INDEX NAME)

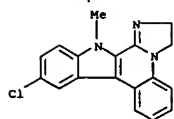


RN 57046-58-9 CAPLUS
 CN 1H-Imidazo[1,2-a]indolo[2,3-c]quinoline, 10-chloro-2,3,13,13b-tetrahydro-1,13-dimethyl- (9CI) (CA INDEX NAME)

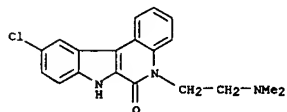


RN 57046-60-3 CAPLUS
 CN 3H-Imidazo[1,2-a]indolo[2,3-c]quinoline, 10-chloro-2,13-dihydro-13-methyl- (9CI) (CA INDEX NAME)

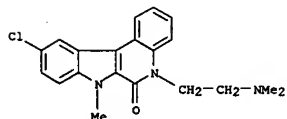
L11 ANSWER 120 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



IT 52865-60-8P 52865-62-0P 52865-69-7P
 52865-78-8P 57046-50-1P 57046-55-6P
 57046-56-7P 57046-59-0P 57046-61-4P
 57046-67-0P 57046-68-1P 57046-69-2P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation of)
 RN 52865-60-8 CAPLUS
 CN 6H-Indolo[2,3-c]quinolin-6-one, 10-chloro-5-[2-(dimethylamino)ethyl]-5,7-dihydro- (9CI) (CA INDEX NAME)



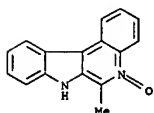
RN 52865-62-0 CAPLUS
 CN 6H-Indolo[2,3-c]quinolin-6-one, 10-chloro-5-[2-(dimethylamino)ethyl]-5,7-dihydro-7-methyl- (9CI) (CA INDEX NAME)



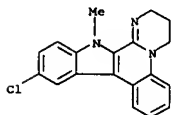
RN 52865-69-7 CAPLUS
 CN 6H-Indolo[2,3-c]quinolin-6-one, 10-chloro-5,7-dihydro-5-methyl- (9CI)
 (CA INDEX NAME)

L11 ANSWER 120 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

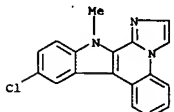
RN 57046-56-7 CAPLUS
 CN 7H-Indolo[2,3-c]quinoline, 6-methyl-, 5-oxide (9CI) (CA INDEX NAME)



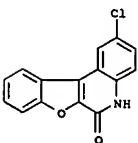
RN 57046-59-0 CAPLUS
 CN Indolo[2,3-c]pyrimido[1,2-a]quinoline, 11-chloro-2,3,4,14-tetrahydro-14-methyl- (9CI) (CA INDEX NAME)



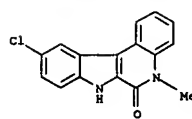
RN 57046-61-4 CAPLUS
 CN 13H-Imidazo[1,2-a]indolo[2,3-c]quinoline, 10-chloro-13-methyl- (9CI) (CA INDEX NAME)



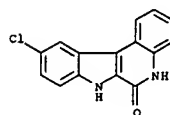
RN 57046-67-0 CAPLUS
 CN Benzo[furo[2,3-c]quinolin-6(5H)-one, 2-chloro- (9CI) (CA INDEX NAME)



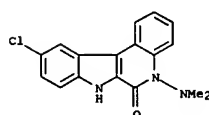
L11 ANSWER 120 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



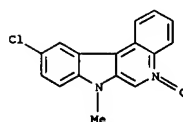
RN 52865-78-8 CAPLUS
 CN 6H-Indolo[2,3-c]quinolin-6-one, 10-chloro-5,7-dihydro- (9CI) (CA INDEX NAME)



RN 57046-50-1 CAPLUS
 CN 6H-Indolo[2,3-c]quinolin-6-one, 10-chloro-5-(dimethylamino)-5,7-dihydro- (9CI) (CA INDEX NAME)

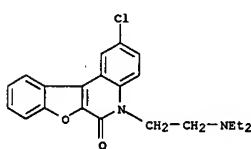


RN 57046-55-6 CAPLUS
 CN 7H-Indolo[2,3-c]quinoline, 10-chloro-7-methyl-, 5-oxide (9CI) (CA INDEX NAME)

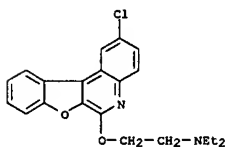


L11 ANSWER 120 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

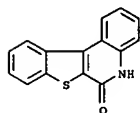
RN 57046-68-1 CAPLUS
 CN Benzo[furo[2,3-c]quinolin-6(5H)-one, 2-chloro-5-[2-(diethylamino)ethyl]- (9CI) (CA INDEX NAME)



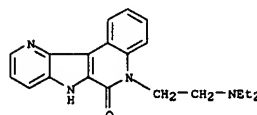
RN 57046-69-2 CAPLUS
 CN Ethanamine, 2-[1-(2-chlorobenzofuro[2,3-c]quinolin-6-yl)oxy]-N,N-diethyl- (9CI) (CA INDEX NAME)



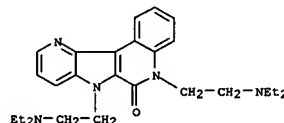
L11 ANSWER 121 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 1975:578880 CAPLUS
 DN 83:178880
 TI Photochemistry of the amide system. V. Synthetic photochemistry with heterocyclic anilides. Stereochemistry of the intramolecular 1,5-hydrogen shifts in nonoxidative photocyclization of benzo[b]thiophene-2-carboxanilides
 AU Kanaoka, Yuichi; Itoh, Kazuhiko; Hatanaka, Yasumaru; Flippen, Judith L.; Karle, Isabella L.; Witkop, Bernhard
 CS Fac. Pharm. Sci., Hokkaido Univ., Sapporo, Japan
 SO Journal of Organic Chemistry (1975), 40(20), 3001-3
 CODEN: JOCEAH; ISSN: 0022-3263
 DT Journal
 LA English
 GI For diagram(s), see printed CA Issue.
 AB Photocyclization of benzo[b]thiophene-2-carboxy-N-methylanilide yielded 1-benzothieno[2,3-c]-trans-14,15-dihydro-5-methylquinolin-6-one (I), while the lower homologous anilide gave 1-benzothieno[2,3-c]-cis-14,15-dihydroquinolin-6-one by two distinct mechanisms. The structures were determined by single-crystal x-ray anal.
 IT 57100-47-7F
 RL: SPN (Synthetic preparation); PREP (Preparation) (preparation of)
 RN 57100-47-7 CAPLUS
 CN [1]Benzothieno[2,3-c]quinolin-6(5H)-one (9CI) (CA INDEX NAME)



L11 ANSWER 122 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 1975:97970 CAPLUS
 DN 82:97970
 TI Carbon-nitrogen vs nitrogen-nitrogen bond formation in nitrenoid cyclization reactions. Pyrolysis of 3-azido-4-(2-pyridyl) carbostyryls
 AU Ning, Robert Y.; Madan, Pradeep B.; Sternbach, Leo H.
 CS Chem. Res. Dep., Hoffmann-La Roche, Inc., Nutley, NJ, USA
 SO Journal of Organic Chemistry (1973), 38(23), 3995-8
 CODEN: JOCEAH; ISSN: 0022-3263
 DT Journal
 LA English
 GI For diagram(s), see printed CA Issue.
 AB Pyrolysis of I (R = H, Br; R1 = H, Et2NCH2CH2) gave mixts. of II and III.
 IT 41895-19-6P 41895-22-1P 41895-23-2P
 RL: SPN (Synthetic preparation); PREP (Preparation) (preparation of)
 RN 41895-19-6 CAPLUS
 CN 6H-Pyrido[2',3':4,5]pyrrolo[2,3-c]quinolin-6-one, 5-[2-(diethylamino)ethyl]-5,7-dihydro- (9CI) (CA INDEX NAME)



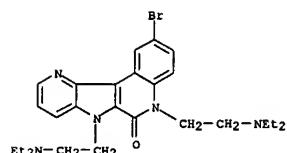
RN 41895-22-1 CAPLUS
 CN 6H-Pyrido[2',3':4,5]pyrrolo[2,3-c]quinolin-6-one, 5,7-bis[2-(diethylamino)ethyl]-5,7-dihydro-, dihydrochloride (9CI) (CA INDEX NAME)



● 2 HCl

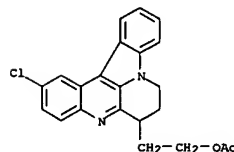
RN 41895-23-2 CAPLUS
 CN 6H-Pyrido[2',3':4,5]pyrrolo[2,3-c]quinolin-6-one, 2-bromo-5,7-bis[2-(diethylamino)ethyl]-5,7-dihydro-, dihydrochloride (9CI) (CA INDEX NAME)

L11 ANSWER 122 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN (Continued).

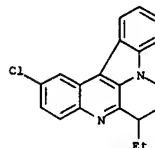


● 2 HCl

L11 ANSWER 123 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 1974:437493 CAPLUS
 DN 81:37493
 TI Friedlaender synthesis and rearrangement of 10-(o-fluorophenyl)-1,4-ethanobenzo[b]-1,5-naphthyridines to benzo[b]indolo[3,2,1-d,e]-1,5-naphthyridines
 AU Coffen, David L.; Wong, Frederick
 CS Chem. Res. Dep., Hoffmann-La Roche Inc., Nutley, NJ, USA
 SO Journal of Organic Chemistry (1974), 39(12), 1765-7
 CODEN: JOCEAH; ISSN: 0022-3263
 DT Journal
 LA English
 GI For diagram(s), see printed CA Issue.
 AB o-Aminophenylketones 2,5-(H2N)RC6H3COR1 (R = H, Cl; R1 = Ph, o-FC6H4, 2-pyridyl) undergo acid catalyzed Friedlaender condensation with 3-quinuclidinone to give 10-phenyl-1,4-ethanobenzo[b]-1,5-naphthyridines (I). I (R = Cl, R1 = o-FC6H4) rearranges when heated with acetate ion to give the benz[b]indolo[3,2,1-d,e]-1,5-naphthyridines II (R2 = H, OAc).
 IT 51230-58-1P 51230-59-2P 51230-61-6P
 51230-62-7P
 RL: SPN (Synthetic preparation); PREP (Preparation) (preparation of)
 RN 51230-58-1 CAPLUS
 CN 6H-Benz[b]indolo[3,2,1-de][1,5]naphthyridine-8-ethanol, 12-chloro-7,8-dihydro-, acetate (ester) (9CI) (CA INDEX NAME)

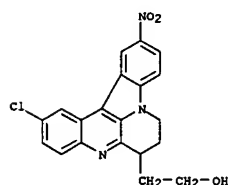


RN 51230-59-2 CAPLUS
 CN 6H-Benz[b]indolo[3,2,1-de][1,5]naphthyridine, 12-chloro-8-ethyl-7,8-dihydro- (9CI) (CA INDEX NAME)

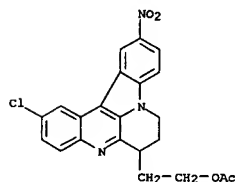


RN 51230-61-6 CAPLUS
 CN 6H-Benz[b]indolo[3,2,1-de][1,5]naphthyridine-8-ethanol,

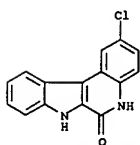
L11 ANSWER 123 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)
12-chloro-7,8-dihydro-2-nitro- (9CI) (CA INDEX NAME)



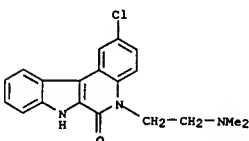
RN 51230-62-7 CAPLUS
CN 6H-Benz[b]indolo[3,2,1-de][1,5]naphthyridine-8-ethanol, 12-chloro-7,8-dihydro-2-nitro-, acetate (ester) (9CI) (CA INDEX NAME)



L11 ANSWER 124 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)
(prepn. and hydrogenolysis of)
RN 52865-39-1 CAPLUS
CN 6H-Indolo[2,3-c]quinolin-6-one, 2-chloro-5,7-dihydro- (9CI) (CA INDEX NAME)



IT 52865-35-7P 52865-36-8P 52865-37-9P
52865-38-0P 52865-40-1P 52865-42-6P
52865-43-7P 52865-44-8P 52865-45-9P
52865-52-8P 52865-53-9P 52865-54-0P
52865-55-1P 52865-56-2P 52865-57-3P
52865-58-4P 52865-59-5P 52865-60-8P
52865-61-9P 52865-62-0P 52865-63-1P
52865-64-2P 52865-65-3P 52865-66-4P
52865-67-5P 52865-69-7P 52865-70-0P
52865-72-2P 52865-73-3P 52865-74-4P
52865-75-5P 52865-76-6P 52865-77-7P
52865-79-9P 52865-80-2P 52865-81-3P
52865-82-4P 52865-83-5P 52865-84-6P
52865-85-7P 52865-86-8P 52865-19-1P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)
RN 52865-35-7 CAPLUS
CN 6H-Indolo[2,3-c]quinolin-6-one, 2-chloro-5-[2-(dimethylamino)ethyl]-5,7-dihydro- (9CI) (CA INDEX NAME)



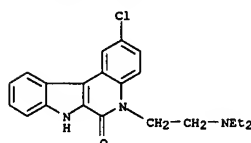
RN 52865-36-8 CAPLUS
CN 6H-Indolo[2,3-c]quinolin-6-one, 2-chloro-5-[2-(diethylamino)ethyl]-5,7-dihydro- (9CI) (CA INDEX NAME)

L11 ANSWER 124 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN
AN 1974:413480 CAPLUS
DN 81:13480
TI Polycyclic compounds
IN Fryer, Rodney I.; Ning, Robert Y. F.; Sternbach, Leo H.; Walser, Armin
PA Hoffmann-La Roche, F., und Co., A.-G.
SO Ger. Offen., 110 pp.
CODEN: GWXXBX
DT Patent
LA German
FAN. CNT 3

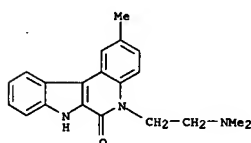
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 2348149	A1	19740404	DE 1973-2348149	19730925
ZA 7305679	A	19740731	ZA 1973-5679	19730820
JP 49069698	A2	19740705	JP 1973-106066	19730921
BE 805199	A1	19740325	BE 1973-135940	19730924
FR 2200004	A1	19740419	FR 1973-34085	19730924
DD 109388	C	19741112	DD 1973-173636	19730924
AU 7360620	A1	19750327	AU 1973-60620	19730924
GB 1400934	A	19750723	GB 1973-44691	19730924
SU 525428	D	19760815	SU 1973-1959333	19730924
AT 7308188	A	19770415	AT 1973-8188	19730924
AT 340425	B	19771212		
NL 7313186	A	19740327	NL 1973-13186	19730925
HU 168788	P	19760728	HU 1973-H01616	19730925
ES 419019	A1	19760616	ES 1974-419019	19740924

PRAI US 1972-292193 A 19720925
GI For diagram(s), see printed CA Issue.
AB Carcinostatic indoloquinolinones I (R = H, Cl, Me, NO₂; R₁ = H, aminoalkyl, Me, Et, CH₂CH₂OH; R₂ = H, CH₂CH₂NMe₂, CH₂CH₂NET₂, Me, Et, allyl, CH₂OMe, CH₂CN; R₃ = H, 10-Cl, 10-Br, 10-OMe, 10-Et, 10-F, 10-NO₂, 8-Cl, 11-Cl, 11-F) and some N-oxides (44 compds.) were prepared. Thus, 2-PhCOOC₆H₄NHCOCH₂Br was cyclized with NaN₃ to give 3-azido-4-phenylcarboxystyryl, which on cyclization with Me₂NCH₂CH₂Cl.-HCl gave I (R₂ = R₃ = H, R₁ = CH₂CH₂NMe₂). I (R = R₂ = H, R₁ = CH₂CH₂NMe₂, R₃ = 10-Cl) at 100 mg/kg day orally for 8 days in sarcoma 180-infected mice gave a control/ treated tumor weight ratio of 3.05; its LD₅₀ was >4000 mg/kg orally.
IT 52865-39-1P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

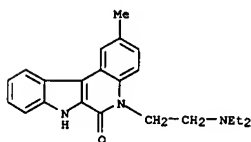
L11 ANSWER 124 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



RN 52865-37-9 CAPLUS
CN 6H-Indolo[2,3-c]quinolin-6-one, 5-[2-(dimethylamino)ethyl]-5,7-dihydro-2-methyl- (9CI) (CA INDEX NAME)

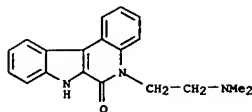


RN 52865-38-0 CAPLUS
CN 6H-Indolo[2,3-c]quinolin-6-one, 5-[2-(diethylamino)ethyl]-5,7-dihydro-2-methyl- (9CI) (CA INDEX NAME)

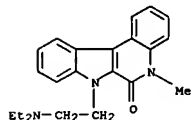


RN 52865-40-4 CAPLUS
CN 6H-Indolo[2,3-c]quinolin-6-one, 5-[2-(dimethylamino)ethyl]-5,7-dihydro-2-methyl- (9CI) (CA INDEX NAME)

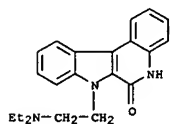
L11 ANSWER 124 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



RN 52865-42-6 CAPLUS
CN 6H-Indolo[2,3-c]quinolin-6-one, 7-[2-(diethylamino)ethyl]-5,7-dihydro-5-methyl- (9CI) (CA INDEX NAME)

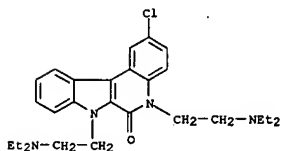


RN 52865-43-7 CAPLUS
CN 6H-Indolo[2,3-c]quinolin-6-one, 7-[2-(diethylamino)ethyl]-5,7-dihydro- (9CI) (CA INDEX NAME)



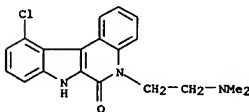
RN 52865-44-8 CAPLUS
CN 6H-Indolo[2,3-c]quinolin-6-one, 5,7-bis[2-(diethylamino)ethyl]-5,7-dihydro-, dihydrochloride (9CI) (CA INDEX NAME)

L11 ANSWER 124 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

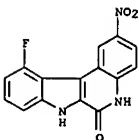


● 2 HCl

RN 52865-54-0 CAPLUS
CN 6H-Indolo[2,3-c]quinolin-6-one, 11-chloro-5-[2-(dimethylamino)ethyl]-5,7-dihydro- (9CI) (CA INDEX NAME)

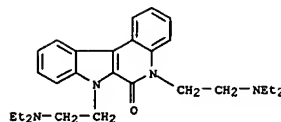


RN 52865-55-1 CAPLUS
CN 6H-Indolo[2,3-c]quinolin-6-one, 11-fluoro-5,7-dihydro-2-nitro- (9CI) (CA INDEX NAME)



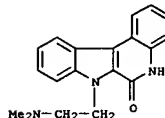
RN 52865-56-2 CAPLUS
CN 6H-Indolo[2,3-c]quinolin-6-one, 10-bromo-2-chloro-5,7-dihydro- (9CI) (CA INDEX NAME)

L11 ANSWER 124 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

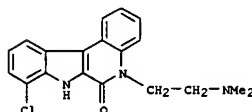


● 2 HCl

RN 52865-45-9 CAPLUS
CN 6H-Indolo[2,3-c]quinolin-6-one, 7-[2-(dimethylamino)ethyl]-5,7-dihydro- (9CI) (CA INDEX NAME)

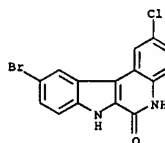


RN 52865-52-8 CAPLUS
CN 6H-Indolo[2,3-c]quinolin-6-one, 8-chloro-5-[2-(dimethylamino)ethyl]-5,7-dihydro- (9CI) (CA INDEX NAME)

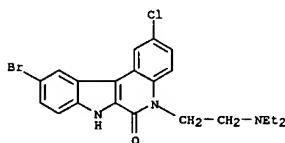


RN 52865-53-9 CAPLUS
CN 6H-Indolo[2,3-c]quinolin-6-one, 2-chloro-5,7-bis[2-(diethylamino)ethyl]-5,7-dihydro-, dihydrochloride (9CI) (CA INDEX NAME)

L11 ANSWER 124 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

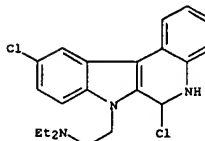


RN 52865-57-3 CAPLUS
CN 6H-Indolo[2,3-c]quinolin-6-one, 10-bromo-2-chloro-5-[2-(diethylamino)ethyl]-5,7-dihydro-, monohydrobromide (9CI) (CA INDEX NAME)



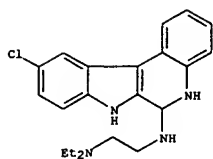
● HBr

RN 52865-58-4 CAPLUS
CN 7H-Indolo[2,3-c]quinoline-7-ethanamine, 6,10-dichloro-N,N-diethyl-5,6-dihydro- (9CI) (CA INDEX NAME)

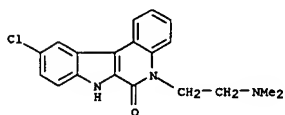


RN 52865-59-5 CAPLUS
CN 1,2-Ethanediimine, N'-(10-chloro-6,7-dihydro-5H-indolo[2,3-c]quinolin-6-yl)-N,N-diethyl- (9CI) (CA INDEX NAME)

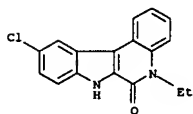
L11 ANSWER 124 OF 162 CAPLUS COPYRIGHT 2005 ACS ON STN (Continued)



RN 52865-60-8 CAPLUS
CN 6H-Indolo[2,3-c]quinolin-6-one, 10-chloro-5-[2-(dimethylamino)ethyl]-5,7-dihydro- (9CI) (CA INDEX NAME)

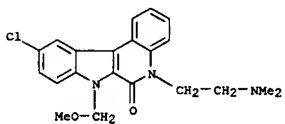


RN 52865-61-9 CAPLUS
CN 6H-Indolo[2,3-c]quinolin-6-one, 10-chloro-5-ethyl-5,7-dihydro- (9CI) (CA INDEX NAME)

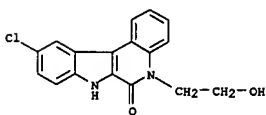


RN 52865-62-0 CAPLUS
CN 6H-Indolo[2,3-c]quinolin-6-one, 10-chloro-5-[2-(dimethylamino)ethyl]-5,7-dihydro-7-methyl- (9CI) (CA INDEX NAME)

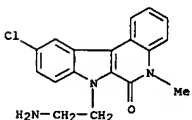
L11 ANSWER 124 OF 162 CAPLUS COPYRIGHT 2005 ACS ON STN (Continued)



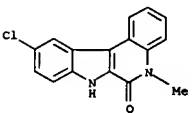
RN 52865-66-4 CAPLUS
CN 6H-Indolo[2,3-c]quinolin-6-one, 10-chloro-5,7-dihydro-5-(2-hydroxyethyl)- (9CI) (CA INDEX NAME)



RN 52865-67-5 CAPLUS
CN 6H-Indolo[2,3-c]quinolin-6-one, 7-(2-aminoethyl)-10-chloro-5,7-dihydro-5-methyl- (9CI) (CA INDEX NAME)

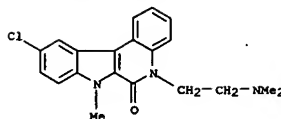


RN 52865-69-7 CAPLUS
CN 6H-Indolo[2,3-c]quinolin-6-one, 10-chloro-5,7-dihydro-5-methyl- (9CI) (CA INDEX NAME)

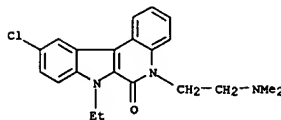


RN 52865-70-0 CAPLUS

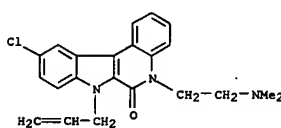
L11 ANSWER 124 OF 162 CAPLUS COPYRIGHT 2005 ACS ON STN (Continued)



RN 52865-63-1 CAPLUS
CN 6H-Indolo[2,3-c]quinolin-6-one, 10-chloro-5-[2-(dimethylamino)ethyl]-7-ethyl-5,7-dihydro- (9CI) (CA INDEX NAME)

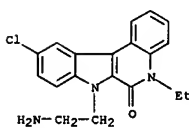


RN 52865-64-2 CAPLUS
CN 6H-Indolo[2,3-c]quinolin-6-one, 10-chloro-5-[2-(dimethylamino)ethyl]-5,7-dihydro-7-(2-propenyl)- (9CI) (CA INDEX NAME)

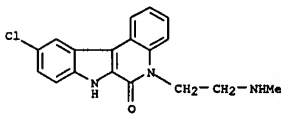


RN 52865-65-3 CAPLUS
CN 6H-Indolo[2,3-c]quinolin-6-one, 10-chloro-5-[2-(dimethylamino)ethyl]-5,7-dihydro-7-(methoxymethyl)- (9CI) (CA INDEX NAME)

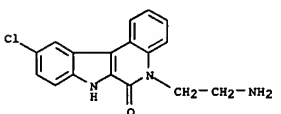
L11 ANSWER 124 OF 162 CAPLUS COPYRIGHT 2005 ACS ON STN (Continued)
CN 6H-Indolo[2,3-c]quinolin-6-one, 7-(2-aminoethyl)-10-chloro-5-ethyl-5,7-dihydro- (9CI) (CA INDEX NAME)



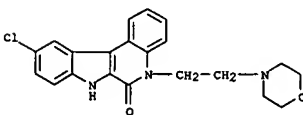
RN 52865-72-2 CAPLUS
CN 6H-Indolo[2,3-c]quinolin-6-one, 10-chloro-5,7-dihydro-5-[2-(methylamino)ethyl]- (9CI) (CA INDEX NAME)



RN 52865-73-3 CAPLUS
CN 6H-Indolo[2,3-c]quinolin-6-one, 5-(2-aminoethyl)-10-chloro-5,7-dihydro- (9CI) (CA INDEX NAME)

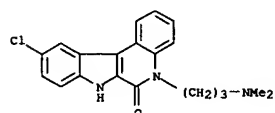


RN 52865-74-4 CAPLUS
CN 6H-Indolo[2,3-c]quinolin-6-one, 10-chloro-5,7-dihydro-5-[2-(4-morpholinyl)ethyl]- (9CI) (CA INDEX NAME)

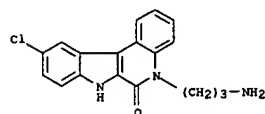


L11 ANSWER 124 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

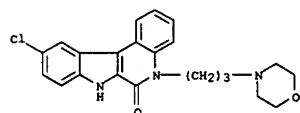
RN 52865-75-5 CAPLUS
 CN 6H-Indolo[2,3-c]quinolin-6-one,
 10-chloro-5-[3-(dimethylamino)propyl]-5,7-
 dihydro- (9CI) (CA INDEX NAME)



RN 52865-76-6 CAPLUS
 CN 6H-Indolo[2,3-c]quinolin-6-one, 5-(3-aminopropyl)-10-chloro-5,7-dihydro-
 (9CI) (CA INDEX NAME)

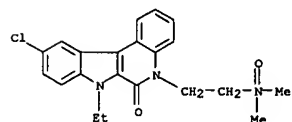


RN 52865-77-7 CAPLUS
 CN 6H-Indolo[2,3-c]quinolin-6-one, 10-chloro-5,7-dihydro-5-[3-(4-
 morpholinyl)propyl]- (9CI) (CA INDEX NAME)

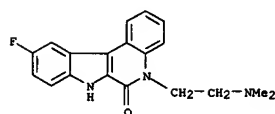


RN 52865-79-9 CAPLUS
 CN 6H-Indolo[2,3-c]quinolin-6-one, 10-chloro-7-[2-(dimethylamino)ethyl]-5,7-
 dihydro- (9CI) (CA INDEX NAME)

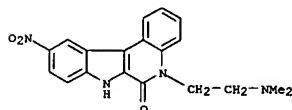
L11 ANSWER 124 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



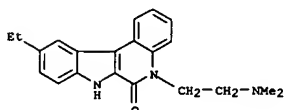
RN 52865-83-5 CAPLUS
 CN 6H-Indolo[2,3-c]quinolin-6-one, 5-[2-(dimethylamino)ethyl]-10-fluoro-5,7-
 dihydro- (9CI) (CA INDEX NAME)



RN 52865-84-6 CAPLUS
 CN 6H-Indolo[2,3-c]quinolin-6-one,
 5-[2-(dimethylamino)ethyl]-5,7-dihydro-10-
 nitro- (9CI) (CA INDEX NAME)

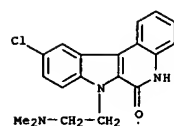


RN 52865-85-7 CAPLUS
 CN 6H-Indolo[2,3-c]quinolin-6-one, 5-[2-(dimethylamino)ethyl]-10-ethyl-5,7-
 dihydro- (9CI) (CA INDEX NAME)

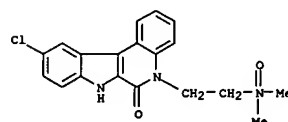


RN 52865-86-8 CAPLUS
 CN 6H-Indolo[2,3-c]quinolin-6-one,
 5-[2-(dimethylamino)ethyl]-5,7-dihydro-10-

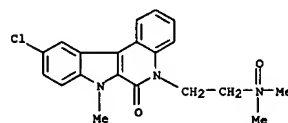
L11 ANSWER 124 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



RN 52865-80-2 CAPLUS
 CN 6H-Indolo[2,3-c]quinolin-6-one,
 10-chloro-5-[2-(dimethyloxidoamino)ethyl]-
 5,7-dihydro- (9CI) (CA INDEX NAME)

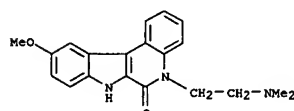


RN 52865-81-3 CAPLUS
 CN 6H-Indolo[2,3-c]quinolin-6-one,
 10-chloro-5-[2-(dimethyloxidoamino)ethyl]-
 5,7-dihydro-7-methyl- (9CI) (CA INDEX NAME)

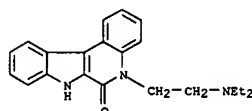


RN 52865-82-4 CAPLUS
 CN 6H-Indolo[2,3-c]quinolin-6-one,
 10-chloro-5-[2-(dimethyloxidoamino)ethyl]-
 7-ethyl-5,7-dihydro- (9CI) (CA INDEX NAME)

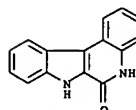
L11 ANSWER 124 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



RN 52918-19-1 CAPLUS
 CN 6H-Indolo[2,3-c]quinolin-6-one, 5-[2-(diethylamino)ethyl]-5,7-dihydro-
 (9CI) (CA INDEX NAME)

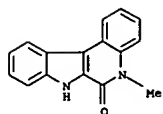


IT 13220-53-6
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (reaction of, with diethylaminoethyl chloride)
 RN 13220-53-6 CAPLUS
 CN 6H-Indolo[2,3-c]quinolin-6-one, 5,7-dihydro- (8CI, 9CI) (CA INDEX NAME)

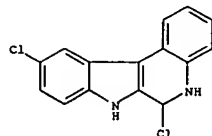


IT 52865-41-5 52865-87-9
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (reaction of, with diethylaminoethyl chloride)
 RN 52865-41-5 CAPLUS
 CN 6H-Indolo[2,3-c]quinolin-6-one, 5,7-dihydro-5-methyl- (9CI) (CA INDEX NAME)

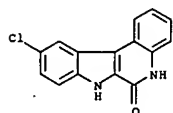
L11 ANSWER 124 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



RN 52865-87-9 CAPLUS
CN 5H-Indolo[2,3-c]quinoline, 6,10-dichloro-6,7-dihydro- (9CI) (CA INDEX NAME)



IT 52865-78-8
RL: RCT (Reactant); RACT (Reactant or reagent)
(reaction of, with dimethylaminoethyl chloride)
RN 52865-78-8 CAPLUS
CN 6H-Indolo[2,3-c]quinolin-6-one, 10-chloro-5,7-dihydro- (9CI) (CA INDEX NAME)



IT 52865-68-6 52865-71-1
RL: RCT (Reactant); RACT (Reactant or reagent)
(reduction of)
RN 52865-68-6 CAPLUS
CN 7H-Indolo[2,3-c]quinoline-7-acetonitrile,
10-chloro-5,6-dihydro-5-methyl-6-oxo- (9CI) (CA INDEX NAME)

L11 ANSWER 125 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN

RN 1973:58384 CAPLUS
DN 78:58384
TI Quinoline derivatives
IN Makikado, Tokuo
PA Shionogi and Co., Ltd.
SO Jpn. Tokkyo Koho, 9 pp.
CODEN: JAXXAD

DT Patent
LA Japanese

FAN. CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 47045354	B4	19721115	JP 1968-91171	19661212

<--

GI For diagram(s), see printed CA Issue.

AB The title compds. (I to III), useful as antipyretics, herbicides, and insecticides, were prepared by heating the corresponding 3-β,γ-unsatd. alkylthioquinolines. E.g., 3-(allylthio)quinoline was heated 1 hr at 200° under Ar to give 73.5% I (X = 2-Me), 9.4% II (X = 2-Me), and 6.4% III (X = H). Similarly prepared

were (X given): I (2,2-Me2 (Ia); 1,2-Me2; 2-Et; 2-iso-Pr); II (1,2-Me2; 2-Et; 2-iso-Pr); III (2-Me (IIIa); 3-Me). 3-Mercapto-4-(2-methylallyl)quinoline (1 g) was heated 1 hr at 100° under Ar to give 645 mg Ia and 256 mg IIIa.

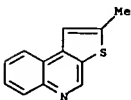
39671-79-9P 39671-85-7P 39671-86-8P

39671-87-9P

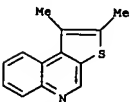
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)

RN 39671-79-9 CAPLUS

CN Thieno[2,3-c]quinoline, 2-methyl- (9CI) (CA INDEX NAME)

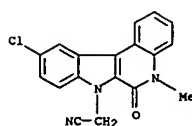


RN 39671-85-7 CAPLUS
CN Thieno[2,3-c]quinoline, 1,2-dimethyl- (9CI) (CA INDEX NAME)

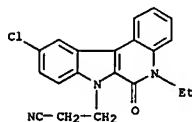


RN 39671-86-8 CAPLUS
CN Thieno[2,3-c]quinoline, 2-ethyl- (9CI) (CA INDEX NAME)

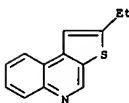
L11 ANSWER 124 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



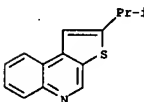
RN 52865-71-1 CAPLUS
CN 7H-Indolo[2,3-c]quinoline-7-propanenitrile,
10-chloro-5-ethyl-5,6-dihydro-6-oxo- (9CI) (CA INDEX NAME)



L11 ANSWER 125 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



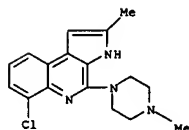
RN 39671-87-9 CAPLUS
CN Thieno[2,3-c]quinoline, 2-(1-methylethyl)- (9CI) (CA INDEX NAME)



L11 ANSWER 126 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 1972:540015 CAPLUS
 DN 77:140015
 TI 2-Methyl-4-(4-methyl-1-piperazinyl)-6-chloro-3H-pyrrolo[2,3-C]quinoline
 IN Kariyone, Kazuo; Nakamura, Yoshiji
 PA Fujisawa Pharmaceutical Co., Ltd.
 SO Jpn. Tokkyo Koho, 3 pp.
 CODEN: JAXXAD
 DT Patent
 LA Japanese
 FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 47028795	B4	19720729	JP 1967-57474	19670906

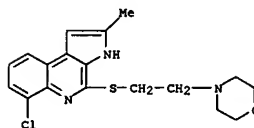
GI For diagram(s), see printed CA Issue.
 AB 2-Methyl-4-(4-methyl-1-piperazinyl)-6-chloro-3H-pyrrolo[2,3-c quinoline (I), a central nervous system depressant, was prepared A mixture of 300 mg 2-methyl-4,6-dichloro-3H-pyrrolo-[2,3-c quinoline, 300 mg N-methylpiperazine, and 50 ml xylene was refluxed 18 hr to give 100 mg I.
 IT 37029-20-2
 RL: RCT (Reactant); RACT (Reactant or reagent) (central nervous system depressant)
 RN 37029-20-2 CAPLUS
 CN 3H-Pyrrolo[2,3-c]quinoline, 7-chloro-2-methyl-4-(4-methyl-1-piperazinyl)- (9CI) (CA INDEX NAME)



L11 ANSWER 127 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 1972:540012 CAPLUS
 DN 77:140012
 TI 2-Methyl-4-(2-morpholinoethylthio)-6-chloro-3H-pyrrolo[2,3-C]quinoline
 IN Kariyone, Kazuo; Nakamura, Yoshiji
 PA Fujisawa Pharmaceutical Co., Ltd.
 SO Jpn. Tokkyo Koho, 3 pp.
 CODEN: JAXXAD
 DT Patent
 LA Japanese
 FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 47028797	B4	19720729	JP 1967-59565	19670916

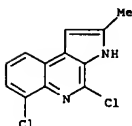
GI For diagram(s), see printed CA Issue.
 AB Na (200 mg) in 10 ml EtOH was dropped into 20 g 2-methyl-6-chloro-3H-pyrrolo[2,3-c quinoline-4(5H)-thione in 50 ml EtOH. After stirring 30 min, 14.4 g 4-(2-chloroethyl)morpholine-HCl and 200 mg Na in 10 ml EtOH were added and the mixture refluxed 7 hr to give 2 g 2-methyl-4-(2-morpholinoethylthio)-6-chloro-3H-pyrrolo[2,3-c quinoline (I). I was a central nervous system depressant.
 IT 37142-00-0
 RL: RCT (Reactant); RACT (Reactant or reagent) (central nervous system depressant)
 RN 37142-00-0 CAPLUS
 CN 3H-Pyrrolo[2,3-c]quinoline, 6-chloro-2-methyl-4-[[2-(4-morpholinyl)ethyl]thio]- (9CI) (CA INDEX NAME)



L11 ANSWER 128 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 1972:540011 CAPLUS
 DN 77:140011
 TI 2-Methyl-4,6-dichloro-3H-pyrrolo[2,3-C]quinoline
 IN Kariyone, Kazuo; Nakamura, Yoshiji
 PA Fujisawa Pharmaceutical Co., Ltd.
 SO Jpn. Tokkyo Koho, 2 pp.
 CODEN: JAXXAD
 DT Patent
 LA Japanese
 FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 47028796	B4	19720729	JP 1967-57475	19670906

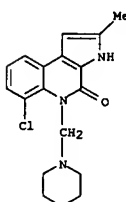
GI For diagram(s), see printed CA Issue.
 AB 2-Methyl-4,6-dichloro-3H-pyrrolo[2,3-c quinoline (I), a central nervous system depressant, was prepared A mixture of 1 g 2-methyl-6-chloro-3H-pyrrolo-[2,3-c quinoline, 30 ml POCl₃, and 0.5 ml PhNMe₂ was heated at 70° 6 hr and kept overnight to give 700 mg I.
 IT 37141-99-4
 RL: RCT (Reactant); RACT (Reactant or reagent) (central nervous system depressant)
 RN 37141-99-4 CAPLUS
 CN 3H-Pyrrolo[2,3-c]quinoline, 4,6-dichloro-2-methyl- (9CI) (CA INDEX NAME)



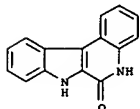
L11 ANSWER 129 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 1972:540010 CAPLUS
 DN 77:140010
 TI 2-Methyl-5-(1-piperidinomethyl)-6-chloro-3H-pyrrolo[2,3-C]quinolin-4(5H)-one
 IN Kariyone, Kazuo; Nakamura, Yoshiji
 PA Fujisawa Pharmaceutical Co., Ltd.
 SO Jpn. Tokkyo Koho, 2 pp.
 CODEN: JAXXAD
 DT Patent
 LA Japanese
 FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 47028794	B4	19720729	JP 1967-57473	19670906

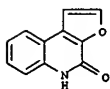
GI For diagram(s), see printed CA Issue.
 AB A mixture of 500 mg 2-methyl-6-chloro-3H-pyrrolo[2,3-c -quinolin-4(5H)-one, 30 ml MeOH, 37% HCHO, and 170 mg piperidine was refluxed 2 days to give 350 mg 2-methyl-5-(1-piperidinomethyl)-6-chloro-3H-pyrrolo[2,3-c quinolin-4(5H)-one (I). I was a central nervous system depressant.
 IT 37029-19-9
 RL: RCT (Reactant); RACT (Reactant or reagent) (central nervous system depressant)
 RN 37029-19-9 CAPLUS
 CN 4H-Pyrrolo[2,3-c]quinolin-4-one, 6-chloro-3,5-dihydro-2-methyl-5-(1-piperidinylmethyl)- (9CI) (CA INDEX NAME)



L11 ANSWER 130 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 1972:126826 CAPLUS
 DN 76:126826
 TI Photo induced reactions. V. Synthesis of heterocyclic-condensed
 quinolones by oxidative photochemical cyclization of amide system
 Kanaoka, Yuichi; Itoh, Kazuhiko
 AU Fac. Pharm. Sci., Hokkaido Univ., Sapporo, Japan
 SO Synthesis (1972), (1), 36
 CODEN: SYNTBF; ISSN: 0039-7881
 DT Journal
 LA English
 OS CASREACT 76:126826
 GI For diagram(s), see printed CA Issue.
 AB Indole-2-carboxanilide was irradiated in C₆H₆-EtOH to give 77% I.
 Irradiation
 of furan- and thiophene-2-carboxanilides gave 25% II (X = O) and 50% II
 (X
 = S), resp.
 IT 13220-53-6P 35621-14-8P 35621-15-9P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation of)
 RN 13220-53-6 CAPLUS
 CN 6H-Indolo[2,3-c]quinolin-6-one, 5,7-dihydro- (8CI, 9CI) (CA INDEX NAME)



RN 35621-14-8 CAPLUS
 CN Furo[2,3-c]quinolin-4(5H)-one (9CI) (CA INDEX NAME)

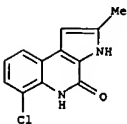


RN 35621-15-9 CAPLUS
 CN Thieno[2,3-c]quinolin-4(5H)-one (6CI, 9CI) (CA INDEX NAME)

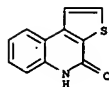
L11 ANSWER 131 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 1971:449056 CAPLUS
 DN 75:49056
 TI 3H-Pyrrolo[2,3-c]quinolin-4(5H)-ones
 IN Umio, Suminori; Kariyone, Kazuo; Nakamura, Hitoshi
 PA Fujisawa Pharmaceutical Co., Ltd.
 SO Jpn. Tokkyo Koho, 2 pp.
 CODEN: JAKXAD
 DT Patent
 LA Japanese
 FAN.CITE 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 46011021	B4	19710320	JP	19661214

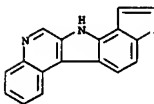
<--
 GI For diagram(s), see printed CA Issue.
 AB Et 3-(2-Nitro-3-chlorophenyl)-5-methylpyrrole-2-carboxylate (10 g) is
 heated at 90° with AcOH and Fe powder to give 6 g I, m.
 303-5° (EtOH), useful as a sedative.
 IT 32743-38-7P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation of)
 RN 32743-38-7 CAPLUS
 CN 4H-Pyrrolo[2,3-c]quinolin-4-one, 6-chloro-3,5-dihydro-2-methyl- (8CI,
 9CI)
 (CA INDEX NAME)



L11 ANSWER 130 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

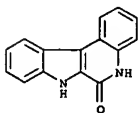


L11 ANSWER 132 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 1971:51574 CAPLUS
 DN 74:51574
 TI Sarcoma-inducing activity of two new heterocyclic types: benzocarbolines
 and thienopyridocarbazoles
 AU Lacassagne, Antoine; Buu-Hoi, N. P.; Zajdela, Francois; Perin-Roussel,
 Odette; Jacquignon, Pierre; Perin, Francois; Hoeffinger, Jean P.
 CS Inst. Radium, Paris, Fr.
 SO Comptes Rendus des Seances de l'Academie des Sciences, Serie D: Sciences
 Naturelles (1970), 271(16), 1474-9
 CODEN: CHDDAT; ISSN: 0567-655X
 DT Journal
 LA French
 GI For diagram(s), see printed CA Issue.
 AB The carcinogenic activity of 15 new indole and carbazole derivs. (0.6 mg
 injected s.c. 3 times at 1-month intervals) was studied in mice. Only
 8,9-benzo-γ-carboline (I) and 12H-pyrido[2,3-a]thieno[2,3-
 i]carbazole (II) induced sarcomas within 553 days.
 12H-Thianaphtho[3,2-
 b]pyrido[2,3-g]indole, 6-methyl-12H-thianaphtho-[3,2-b]pyrido[3,2-
 g]indole, and 7H-thianaphtho[3,2-b]pyrido-[3,2-g]indole were inactive,
 indicating that replacement of a benzene ring by a thiophene ring reduced
 the oncogenic activity. Other structure-activity relations are
 discussed.
 IT 207-81-8
 RL: BAC (Biological activity or effector, except adverse); BSU
 (Biological
 study, unclassified); BIOL (Biological study)
 (carcinogenic activity of)
 RN 207-81-8 CAPLUS
 CN 12H-Thieno[2',3':6,7]indolo[2,3-c]quinoline (7CI, 8CI, 9CI) (CA INDEX
 NAME)

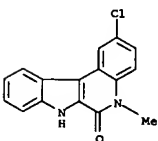


L11 ANSWER 133 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 1969:481230 CAPLUS
 DN 71:81230
 TI Thio-Claisen rearrangement of allyl 3-quinolyl sulfides
 AU Makisumi, Yasuo; Murabayashi, Akira
 CS Shionogi Res. Lab., Shionogi and Co., Ltd., Osaka, Japan
 SO Tetrahedron Letters (1969), (29), 2449-52
 CODEN: TETLEA; ISSN: 0040-4039
 DT Journal
 LA English
 GI For diagram(s), see printed CA Issue.
 AB Alkylation of Na 3-quinolyl-mercaptide with H₂C:CHCH₂Br at 20° (argon atmospheric) yields 90% allyl 3-quinolyl sulfide (Ia); picrate m. 187.0-7.5°. The corresponding oily methallyl 3-quinolyl sulfide (Ib) (picrate m. 147-8°), was similarly obtained in 95% yield. Ia heated 2 hrs. (argon atmospheric) in PhNMe₂ at 200° yielded 2 cyclization products: (II, R = H) (IIa), b.p. 25 135-8° (picrate m. 223-4°), and (III, R = H) (IIIa) (picrate m. 220-2°), in 66.6 and 15% yields, resp. Neat rearrangement of Ia at 200° 1 hr. (argon atmospheric) gave 9.4% oil IV (picrate m. 254-5°), in addition to 73.5% IIa and 6.4% IIIa. N.M.R. spectra of IIa and IIIa were determined. Desulfurization of IIa and IIIa with Raney Ni W-2 in alc. gave 4-propylquinoline; picrate m. 209-10°. IV, characterized by N.M.R. signals was identical with a dehydrogenation product obtained by heating Ia with 10% Pd-C at 300° 5 min. Similarly, rearrangement of Ib in PhNMe₂ gave 15% II (R = Me) (IIb), b.p. 25 140° (picrate m. 206.0-6.5°), and 70.4% III (R = Me) (IIIb), m. 51.0-1.5°, also obtained in 24 and 61.5% yields from neat rearrangement of Ib. Desulfurization of IIb and IIIb gave the identical alkylquinoline (V, R = Me) (Vb), b.p. 25 103°; picrate m. 166-7°. To trap the suggested Claisen-type product (VI), the rearrangement of Ib was carried out in the presence of 1.5 moles of (ArCO)₂O and VI (R = Me) (Vib) was trapped as its butyrate ester (VII, R = Me) (picrate m. 128-9°), hydrolyzed by alkali (argon atmospheric) to yield very unstable VIB, m. 58-60°. On heating VIB cyclized to IIB and IIIb in the rearrangement reaction of Ib. The formation of VI from I corresponds to the [3,3] sigmatropic rearrangement of aromatic allyl sulfides. Structures were confirmed by N.M.R. spectrometry in CDCl₃.
 IT 23681-26-7P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 LA (preparation of)
 RN 23681-26-7 CAPLUS
 CN Thieno[2,3-c]quinoline, 2-methyl-, monopicrate (8CI) (CA INDEX NAME)
 CM 1
 CRN 39671-79-9
 CMP C12 H9 N S

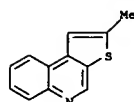
L11 ANSWER 134 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 1969:438927 CAPLUS
 DN 71:38927
 TI Preparation of 1,4-benzodiazepinones, carbostyrils and indolo[2,3-c]quinolones
 AU Petersen, John B.; Lakowitz, Karl H.
 CS Rexolin Chem. AB, Halsingborg, Swed.
 SO Acta Chemica Scandinavica (1947-1973) (1969), 23(3), 971-4
 CODEN: ACSA44; ISSN: 0001-5393
 DT Journal
 LA English
 OS CASREACT 71:38927
 GI For diagram(s), see printed CA Issue.
 AB Azidoacetylation, of 2-amino-benzophenones gives 2-azidoacetamidobenzophenones, from which 1,4-benzodiazepinones, carbostyrils, and indolo[2,3-c]quinolones (e.g. I) were prepared in high yields in a simple one step syntheses.
 IT 13220-53-6P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 LA (preparation of)
 RN 13220-53-6 CAPLUS
 CN 6H-Indolo[2,3-c]quinolin-6-one, 5,7-dihydro- (8CI, 9CI) (CA INDEX NAME)



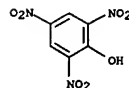
RN 23207-82-1 CAPLUS
 CN 6H-Indolo[2,3-c]quinolin-6-one, 2-chloro-5,7-dihydro-5-methyl- (8CI) (CA INDEX NAME)



L11 ANSWER 133 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



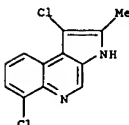
CM 2
 CRN 88-89-1
 CMP C6 H3 N3 O7



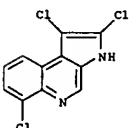
L11 ANSWER 135 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 1969:77932 CAPLUS
 DN 70:77932
 TI 3H-Pyrrolo[2,3-c]quinolines
 IN Hattori, Kiyoshi; Hashimoto, Masashi; Umio, Suminori
 PA Fujisawa Pharmaceutical Co., Ltd.
 SO Jpn. Tokkyo Koho, 2 pp.
 CODEN: JAXXAD
 DT Patent
 LA Japanese
 FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 44001535	B4	19690123	JP	19660205

<--
 GI For diagram(s), see printed CA Issue.
 AB Manufacture of I, useful as an intermediate for the synthesis of tranquilizing and analgesic 3H-pyrrolo[2,3-c]quinoline compds., is described. In an example, 150 mg. 3-(2-nitro-3-chlorophenyl)-4-chloro-5-methylpyrrole - 2 - carboxyaldehyde in 15 cc. EtOH is subjected to catalytic reduction using Raney Ni at standard temperature and pressure, filtered, the filtrate concentrated in vacuo, chromatographed on Al₂O₃, and the column eluted with AcOEt to give 80 mg. I (R = Me), m. >280° (Me₂CO). Similarly prepared is I (R = Cl), m. 296-9° (decomposition).
 IT 21548-29-8P 21548-30-1P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 LA (preparation of)
 RN 21548-29-8 CAPLUS
 CN 3H-Pyrrolo[2,3-c]quinoline, 1,6-dichloro-2-methyl- (8CI) (CA INDEX NAME)

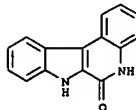


RN 21548-30-1 CAPLUS
 CN 3H-Pyrrolo[2,3-c]quinoline, 1,2,6-trichloro- (8CI) (CA INDEX NAME)

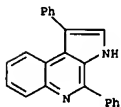


L11 ANSWER 135 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

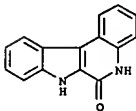
L11 ANSWER 136 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 1968:435990 CAPLUS
 DN 69:35990
 TI Reactions of indole derivatives. IX. Photochemical cyclodehydrogenations in the indole series
 AU Winterfeldt, E.; Altmann, H. J.
 CS Tech. Univ., Berlin, Fed. Rep. Ger.
 SO Angewandte Chemie, International Edition in English (1968), 7(6), 466-7
 CODEN: ACIEAY; ISSN: 0570-0833
 DT Journal
 LA English
 GI For diagram(s), see printed CA Issue.
 AB The photochem. cyclodehydrogenation of α - and β -indolecarboxylic acid anilides yielded 7H-indolo[2,3-c]quinolin-6(5H)-one (I) and 11H-indolo[3,2-c]quinolin-6(5H)-one (II), resp.
 IT 13220-53-6P
 RL: SPN (Synthetic preparation); PREP (Preparation) (preparation of)
 RN 13220-53-6 CAPLUS
 CN 6H-Indolo[2,3-c]quinolin-6-one, 5,7-dihydro- (8CI, 9CI) (CA INDEX NAME)



L11 ANSWER 137 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 1967:2524 CAPLUS
 DN 66:2524
 TI Triazaphenanthrenes. VI. Further observations on the Widman-Stoermer and Borsche reactions
 AU Atkinson, Charles M.; Biddle, B. N.
 CS Derby District Coll. Technol., Luton, UK
 SO Journal of the Chemical Society [Section] C: Organic (1966), (22), 2053-60
 CODEN: JSOORX; ISSN: 0022-4952
 DT Journal
 LA English
 OS CASREACT 66:2524
 GI For diagram(s), see printed CA Issue.
 AB cf. CA 57, 9853a. The title reactions were applied to the preparation of 1,2,9-triazaphenanthrenes (I) and 1,2,7- (II) and 1,2,5-triazaphenanthrenes (III). A modified Borsche cyclization appears to be generally applicable to aminoquinolines but attempts to extend this to simpler aromatic systems failed. 22 references.
 IT 13217-14-6P
 RL: SPN (Synthetic preparation); PREP (Preparation) (preparation of)
 RN 13217-14-6 CAPLUS
 CN 3H-Pyrrolo[2,3-c]quinoline, 1,4-diphenyl- (8CI) (CA INDEX NAME)

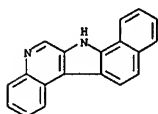


L11 ANSWER 138 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 1967:2434 CAPLUS
 DN 66:2434
 TI Reactions of oxindoles and isatin with nitrobenzyl chlorides. Formation of 2'-hydroxy-3,3'-indole-2,3'-indole
 AU Kikumoto, Ryoji; Kobayashi, Teinosuke
 CS Gakushuin Univ., Tokyo, Japan
 SO Tetrahedron (1966), 22(10), 3337-43
 CODEN: TETRAB; ISSN: 0040-4020
 DT Journal
 LA English
 GI For diagram(s), see printed CA Issue.
 AB Oxindole reacts with p-O2NC6H4CH2Cl to give 3-(4'-nitrobenzyl)oxindole, but with o-O2NC6H4CH2Cl (Ia), an abnormal product, 2'-hydroxy-spiro [2H-indole-2,3'-3'H-indole] (I) is produced. The structure of I has been elucidated on the basis of the ir, uv, and mass spectra, and confirmed by the analogous reactions of 3-methyl-, 4-methyl-, and 3,3-dimethyloxindoles with Ia. Isatin reacts with Ia to give 3'-(o-nitrobenzyl)-2-oxospiro [indoline-3,2'-oxiranel] (II). 17 references.
 IT 13220-53-6P
 RL: SPN (Synthetic preparation); PREP (Preparation) (preparation of)
 RN 13220-53-6 CAPLUS
 CN 6H-Indolo[2,3-c]quinolin-6-one, 5,7-dihydro- (8CI, 9CI) (CA INDEX NAME)



L11 ANSWER 139 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 1966:6131 CAPLUS
 DN 64:6131
 OREF 64:1129a-c
 TI Relations between molecular structure and carcinogenic activity of benzopyridocarbazoles and analogous polycyclic compounds
 AU Lacassagne, Antoine; Buu-Hoi, Nguyen P.; Zajdela, Francois; Jacquignon, Pierre; Perin, Francois
 SO Compt. Rend. (1963), 257(4(Groupe 14)), 818-22
 From: CZ 1965(10), Abstr. No. 1135.
 DT Journal
 LA French
 AB The carcinogenic activity of the following benzo- or naphthopyridocarbazoles and dibenzo- or benzonaphthocarbazoles was investigated: 5,6-benzopyrido[2',3':1,2]carbazole and the [3',2':1,2] isomer, 1,2-benzopyrido[2',3':5,6]carbazole, 5,6-benzopyrido[3',2':3,4]carbazole, 7,8-benzopyrido[2',3':1,2]carbazole, 6'-methyl-7,8-benzopyrido[2',3':1,2]carbazole, 1,2:6,7-dibenzo- β -carboline naphtho[1',2':1,2]pyrido[2'',3'':5,6]carbazole, naphtho[1',2':1,2]pyrido[3'',2'':7,8]carbazole, naphtho[2',1':1,2]pyrido[2'',3'':5,6]carbazole, naphtho[2',1':1,2]pyrido[3'',2'':7,8]carbazole, naphtho[1',2':1,2]pyrido[2'',3'':5,6]carbazole, naphtho[1',2':1,2]pyrido[2'',3'':7,8]carbazole, 1,2-benzonaphtho[2',1':6,7]- β -carboline and its [1',2':6,7] isomer. The sarcomagenic or carcinogenic activity depended on changes of mol. weight through methyl substitution in the 6 position or on the position of the N atom. The activity was also influenced by the general configuration.

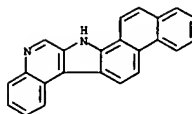
For example, mols. with the N atom in indole configuration were inactive, while those with N in pyridine configuration were strongly sarcomagenic. Mols. of the series investigated, with more than 5 rings were inactive.
 IT 207-90-9, 7H-Benz[6,7]indolo[2,3-c]quinoline 208-02-6, 13H-Naphth[1',2':6,7]indolo[2,3-c]quinoline 237-37-6, 15H-Naphth[2',1':6,7]indolo[2,3-c]quinoline (carcinogenic activity of)
 RN 207-90-9 CAPLUS
 CN 7H-Benz[6,7]indolo[2,3-c]quinoline (7CI, 8CI, 9CI) (CA INDEX NAME)



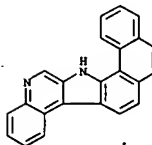
RN 208-02-6 CAPLUS
 CN 13H-Naphth[1',2':6,7]indolo[2,3-c]quinoline (7CI, 8CI, 9CI) (CA INDEX NAME)

L11 ANSWER 140 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 1963:475265 CAPLUS
 DN 59:75265
 OREF 59:13957g-h, 13958e-h, 13959a-f
 TI Carcinogenic nitrogen compounds. XXXVII. Some isosteres and homologs of the carcinogenic benzopyridocarbazoles
 AU Buu-Hoi, N. P.; Jacquignon, P.; Hoefflinger, J. P.
 SO C.N.R.S., Gif-Sur-Yvette, Fr.
 CS Journal of the Chemical Society, Abstracts (1963), (Oct.), 4754-8
 CODEN: JCSAAZ; ISSN: 0590-9791
 DT Journal
 LA Unavailable
 GI For diagram(s), see printed CA Issue.
 AB Cf. CA 59, 1636g. Several thiophene isosteres and mono- and dimethyl homologs of the carcinogenic bisangular benzopyridocarbazoles have been synthesized from quinolylhydrazines for determination of their biol. activity.
 Evaluation by subcutaneous injection in mice of the sarcomagenic activity of the methylated benzopyridocarbazoles described showed that substitution is strongly prejudicial to this type of biol. activity, all the substances tested being either completely inactive or only very slightly carcinogenic. 6-Methyl-8-nitroquinoline (39 g.) was obtained from 50 g. 4-amino-3-nitrotoluene by a Skraup reaction with 110 g. glycerol, 60 cc. H₂SO₄, and 52 g. arsenic acid. Reduction with Fe and HOAc gave 22 g. 8-amino-6-methylquinoline, converted in the usual way into 6-methyl-8-quinolylhydrazine, straw colored needles, m. 107° (cyclohexane). 1-Tetralone, 7-methyl-1-tetralone, and 4,5,6,7-tetrahydro-5-oxo-1-benzothiophene were prepared by cyclization of the appropriate γ -butyryl chlorides, and 2-tetralone and 6-methyl-2-tetralone by reduction of the corresponding methoxy-naphthalenes.
 The following derivs. (Ia) of 1-tetralone were prepared by refluxing a solution of the tetralone (1 mole) and the quinolylhydrazine dihydrochloride (1 mole) in aqueous EtOH 1 hr. with NaOAc, and subsequent basification with aqueous NH₃ (R, R₁, m.p. given): Me, 3-quinolyl, 144°; Me, 6-quinolyl, 234°; Me, 7-quinolyl, 237°; Me, 8-quinolyl, 178°; H, 6-methyl-8-quinolyl, 168°; and Me, 6-methyl-8-quinolyl, 211°. The following derivs. of 4,5,6,7-tetrahydro-4-oxo-1-benzothiophene were similarly prepared: 3-quinolylhydrazine, m. 189°; 5-quinolylhydrazine, m. 247°; 6-quinolylhydrazine, m. 213°; and 8-quinolylhydrazine, m. 197°. Most of the quinolylhydrazones could be recrystd. from EtOH or Celio as golden yellow to beige needles, but some formed viscous resins; in the case of the 5-, 6-, and 8-quinolylhydrazones of 6-methyl-2-tetralone, spontaneous cyclization occurred during the preparation of the hydrazones under the influence of the HOAc present. The following benzopyridocarbazoles were prepared as described in a previous paper (CA 56, 15493b), with a mixture of H₂SO₄ and HOAc, to give the corresponding dihydrocarbazole, or by heating with ZnCl₂ 45 min. at 280-300° to give the carbazole directly; dihydrocarbazoles were dehydrogenated by repeated sublimation over 5% Pd-C (chloranil in boiling xylene gave inferior yields and quality) [the carbazoles were recrystd. from EtOH, C₆H₆, or EtOH-C₆H₆, cream to pale

L11 ANSWER 139 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

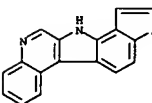


RN 237-37-6 CAPLUS
 CN 15H-Naphth[2',1':6,7]indolo[2,3-c]quinoline (7CI, 8CI, 9CI) (CA INDEX NAME)

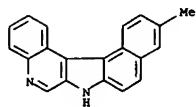


L11 ANSWER 140 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)
 yellow silky needles; picrates, bright yellow to red needles (EtOH for the

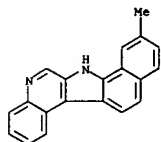
sol. substances, chlorobenzene or nitrobenzene for insol. ones)] (carbazole, m.p. of carbazole, and m.p. and decompn. point of picrate given): I (R = H), 279°, 285°, above 265°; I (R = Me), 228°, 280°, above 260°; 1,2-dihydro deriv. of II (R = Me, R' = H), 224°, 278°, above 270°; II (R = Me, R' = H), 259°, 297°, above 280°; 1,2-dihydro deriv. of II (R = R' = Me), 214°, 290°, above 275°; II (R = R' = Me), 247°, 293°, above 275°; 1,2-dihydro deriv. of II (R = H, R' = Me), 202°, 312°, above 270°; II (R = H, R' = Me), 258°, 335°, -; 3,4-dihydro deriv. of III, 282°, 305°, above 265°; III, 345°, 314°, -; 1,2-dihydro deriv. of IV, 342°, 268°, above 255°; IV, 367°, 277°, above 245°; 1,2-dihydro deriv. of V, 248°, 287°, above 270°; V, 284, 310°, above 280°; 3,4-dihydro deriv. of VI, 338°, 318°, above 287°; VI, 389°, 333°, above 300°; VII, 239°, 312°, above 270°; 1,2-dihydro deriv. of VIII, 205, 237°, 0 above 210°; VIII, 217, 250°, above 225°; IX (all the thiophene derivs. were prepd. by the zinc chloride-cyclization method), 207°, 295°, above 270°; X, 305°, 227°, above 170°; and XI, 287°, 337°, above 300°. XII, prepd. in 50% yield from the corresponding 3-quinolylhydrazine by the ZnCl₂ method and purified via the picrate [golden yellow prisms, m. 300° (PhCl)], formed yellowish needles, m. 269° (MeOH). 7,8-Dihydro-3"-methyl-3,4:5,6-dibenzocarbazole, prepd. by the H₂SO₄-HOAc method, formed cream colored leaflets, m. 325° (decompd. above 306°) (EtOH); picrate, orange prisms, m. 307° (decompd. above 280°) (EtOH). XIII crystd. as cream colored needles, m. 289, from C₆H₆-cyclohexane; picrate, deep yellow prisms, m. 260° (decompd. above 240°) (EtOH). XIV crystd. as pale yellow needles, m. 305° (C₆H₆); picrate, yellow needles, m. 269° (EtOH). The ultraviolet spectra of many of these derivs. were detd. and were in agreement with the postulated structures.
 IT 207-81-8, 12H-Thieno[2',3':6,7]indolo[2,3-c]quinoline 100300-55-8, 7H-Benz[4,5]indolo[2,3-c]quinoline, 11-methyl-100302-66-7, 7H-Benz[6,7]indolo[2,3-c]quinoline, 9-methyl-100335-97-5, 7H-Benz[4,5]indolo[2,3-c]quinoline, 8,9-dihydro-11-methyl-100435-64-1, 12H-Thieno[2',3':6,7]indolo[2,3-c]quinoline, picrate 101634-74-6, 7H-Benz[6,7]indolo[2,3-c]quinoline, 9-methyl-, picrate 101797-15-3 7H-Benz[4,5]indolo[2,3-c]quinoline, 8,9-dihydro-11-methyl-, picrate 101838-30-6, 7H-Benz[4,5]indolo[2,3-c]quinoline, 11-methyl-, picrate (preparation of)
 RN 207-81-8 CAPLUS
 CN 12H-Thieno[2',3':6,7]indolo[2,3-c]quinoline (7CI, 8CI, 9CI) (CA INDEX NAME)



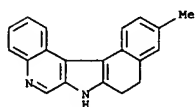
L11 ANSWER 140 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)
 RN 100300-55-8 CAPLUS
 CN 7H-Benz[4,5]indolo[2,3-c]quinoline, 11-methyl- (7CI) (CA INDEX NAME)



RN 100302-66-7 CAPLUS
 CN 7H-Benz[6,7]indolo[2,3-c]quinoline, 9-methyl- (7CI) (CA INDEX NAME)



RN 100335-97-5 CAPLUS
 CN 7H-Benz[4,5]indolo[2,3-c]quinoline, 8,9-dihydro-11-methyl- (7CI) (CA INDEX NAME)

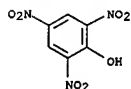


RN 100435-64-1 CAPLUS
 CN 12H-Thieno[2',3':6,7]indolo[2,3-c]quinoline, picrate (7CI) (CA INDEX NAME)

CM 1

CRN 207-81-8
 CMF C17 H10 N2 S

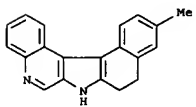
L11 ANSWER 140 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



RN 101797-15-3 CAPLUS
 CN 7H-Benz[4,5]indolo[2,3-c]quinoline, 8,9-dihydro-11-methyl-, picrate (7CI) (CA INDEX NAME)

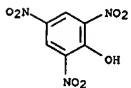
CM 1

CRN 100335-97-5
 CMF C20 H16 N2



CM 2

CRN 88-89-1
 CMF C6 H3 N3 O7

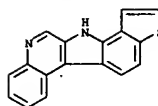


RN 101838-30-6 CAPLUS
 CN 7H-Benz[4,5]indolo[2,3-c]quinoline, 11-methyl-, picrate (7CI) (CA INDEX NAME)

CM 1

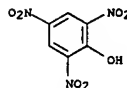
CRN 100300-55-8
 CMF C20 H14 N2

L11 ANSWER 140 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



CM 2

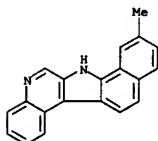
CRN 88-89-1
 CMF C6 H3 N3 O7



RN 101634-74-6 CAPLUS
 CN 7H-Benz[6,7]indolo[2,3-c]quinoline, 9-methyl-, picrate (7CI) (CA INDEX NAME)

CM 1

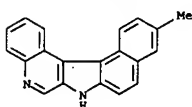
CRN 100302-66-7
 CMF C20 H14 N2



CM 2

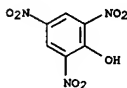
CRN 88-89-1
 CMF C6 H3 N3 O7

L11 ANSWER 140 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

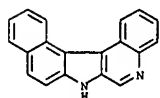


CM 2

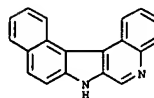
CRN 88-89-1
 CMF C6 H3 N3 O7



L11 ANSWER 141 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 1962:427478 CAPLUS
 DN 57:27478
 OREF 57:5475c-d
 TI Absorption spectra of benzopyridocarbazoles in the medium ultraviolet region
 AU Buu-Hoi, Ng. Ph: Jacquignon, Pierre; Perin, Francois
 CS Inst. Chim. Subst. Naturelles, C.N.-R.S., Seine-et-Oise, Fr.
 SO Bulletin de la Societe Chimique de France (1962) 109-11
 CODEN: BSCFAS; ISSN: 0037-8968
 DT Journal
 LA Unavailable
 AB Observation of the ultraviolet spectra of benzopyridocarbazoles obtained through indolization of the quinolyldiazones of α - and β -tetralones indicated compliance with Marckwald's rule. Thus, indolization of 6- and 7-quinolyldiazones of α - and β -tetralones took place in positions 5 and 8, resp. Attention is called to the strong band, 300-350 m μ , of 5,6-benzopyrido[3',2':1,2]carbazole and 1,2-benzopyrido[3',2':5,6]carbazole (these are carcinogens).
 IT 194-61-6, 7H-Benz[4,5]indolo[2,3-c]quinoline (spectrum of)
 RN 194-61-6 CAPLUS
 CN 7H-Benz[4,5]indolo[2,3-c]quinoline (7CI, 8CI, 9CI) (CA INDEX NAME)

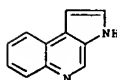


L11 ANSWER 142 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 1962:427477 CAPLUS
 DN 57:27477
 OREF 57:5475b-c
 TI Interpretation of the ultraviolet spectrum of oxalyl chloride
 AU Saksena, B. D.; Jauhari, G. S.
 CS Natl. Phys. Lab., New Delhi, India
 SO Journal of Chemical Physics (1962), 36, 2233-5
 CODEN: JCPSA6; ISSN: 0021-9606
 DT Journal
 LA Unavailable
 AB Arguments were given opposing the view of Sidman (CA 50, 9871a) that the cis form of oxalyl chloride gives a continuous spectrum and the trans form gives a discrete band structure. Evidence was summarized for the viewpoint that the discrete structure is given by both the cis and trans forms.
 IT 194-61-6, 7H-Benz[4,5]indolo[2,3-c]quinoline (spectrum of)
 RN 194-61-6 CAPLUS
 CN 7H-Benz[4,5]indolo[2,3-c]quinoline (7CI, 8CI, 9CI) (CA INDEX NAME)

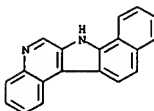


L11 ANSWER 143 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 1962:403964 CAPLUS
 DN 57:3964
 OREF 57:791c-1
 TI Condensed pyrrole compounds. I. 3H-Pyrrolo[2,3-c]quinolines
 AU Govindachari, T. R.; Rajappa, S.; Sudarsanam, V.
 CS Presidency Coll., Madras, India
 SO Tetrahedron (1961), 16, 1-4
 CODEN: TETRA8; ISSN: 0040-4020
 DT Journal
 LA Unavailable
 GI For diagram(s), see printed CA issue.
 AB cf. CA 54, 2385c. Several 3H-pyrrolo[2,3-c]quinolines (I) were synthesized by the Fischer indole procedure. MeCOCH₂H (2 ml.) and 4 g. 3-quinolyldiazine refluxed 15 min. in alc. with a few drops of AcOH and the product crystallized from MeOH gave 5 g. hydrazone, C₁₂H₁₁N₃O₂, m. 179-80°, refluxed (2.5 g.) 4 hrs. in 30 ml. alc. with 2 ml. concentrated H₂SO₄, the solution neutralized with NH₄OH, and the H₂O-washed precipitate crystallized from dilute alc. to yield 2 g. Et pyruvate 3-quinolyldiazine, m. 175-6°. The hydrazone (1 g.) and 5 g. freshly fused ZnCl₂ heated 45 min. with stirring at 260° (metal bath), the cooled complex decomposed with 10% HCl, the mixture poured into 50 ml. 25% aqueous NaOH, the base extracted with Et₂O, the material from 3 batches sublimed at 110-70°/0.0001 mm., and the sublimate crystallized from MeOH-C₆H₆ gave 100 mg. I (R = R₁ = R₂ = H), m. 228-30°, λ 240, 305, 320 m μ (log ϵ 4.47, 4.03, 3.91 (neutral), λ 230, 342 m μ (log ϵ 4.37, 4.03, acid). Acetone 3-quinolyldiazine (1.1 g., m. 194-5°) refluxed with 4 g. fused ZnCl₂ 3 hrs. in 15 ml. pyrene, the Et₂O-washed solid digested with 10% HCl, the acid solution poured into 75 ml. chilled 25% aqueous NaOH, extracted with CHCl₃, the product chromatographed from C₆H₆ over Al₂O₃, and the C₆H₆-washed column eluted with 1:199 C₆H₆-alc. gave I (R = R₁ = R₂ = H, R₁ = Me), m. 218-19°, λ 230, 245, 312, 325 m μ (log ϵ 4.54, 4.56, 4.21, 4.18 (neutral), λ 262, 275, 345 m μ (log ϵ 3.66, 3.46, 4.25, acid); picrate m. 261-3° (decomposition). Similarly, cyclization of 3-quinolyldiazones of MeCOEt, Et₂CO, MeCOPh, EtCOPh, PhCH₂COPh, and α -tetralone gave the corresponding I (R, R₁, R₂, m.p. (solvent), and λ in m μ (log ϵ) given): H, Me, Me, 230-2°, 230, 240, 325 (4.38, 4.39, 4.09); H, Et, Me, 203-4°, 230, 240, 325 (4.49, 4.48, 4.18); H, Ph, H, 244-5°, 235, 260, 335 (4.52, 4.36, 4.52); H, Ph, Me, 216-19°, 235, 255, 335 (4.39, 4.35, 4.29); H, Ph, Ph, 269-71°, 240, 260, 335 (4.43, 4.43, 4.44). Also prepared was 12,13-dihydro-7H-dibenzo[c,1]- β -carboline (II), m. 333-5°, λ 240, 265, 350, 368 m μ (log ϵ 4.45, 4.25, 4.46, 4.38, neutral), λ 235, 260, 350, 395 m μ (log ϵ 4.46, 4.29, 4.03, 4.42, acid). II (0.4 g.) and 0.4 g. Pd-C sublimed at 280-300°/5 mm. and the sublimate crystallized from C₅H₅N-MePh gave 100 mg. 7H-dibenzo[c,1]- β -carboline, m. 252-4° (decomposition), λ 245, 275, 300, 335, 380, 405 m μ (log ϵ 4.31, 4.66, 4.31, 4.29, 3.75, 3.40). The simple pyrroloquinolines had a characteristic violet fluorescence in acid solution and exhibited a bathochromic shift of about 20-35 m μ of the longest wave length. Comps. with a 2-Ph group showed a blue fluorescence even in neutral solution
 IT 232-86-0, 3H-Pyrrolo[2,3-c]quinoline (derivs.)
 RN 232-86-0 CAPLUS

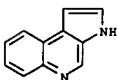
L11 ANSWER 143 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)
 CN 3H-Pyrrolo[2,3-c]quinoline (7CI, 8CI, 9CI) (CA INDEX NAME)



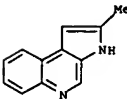
IT 207-90-9, 7H-Benz[6,7]indolo[2,3-c]quinoline 232-86-0, 3H-Pyrrolo[2,3-c]quinoline 88550-77-0, 3H-Pyrrolo[2,3-c]quinoline, 2-methyl- 88550-78-1, 3H-Pyrrolo[2,3-c]quinoline, 2-methyl-, picrate 95493-33-7, 3H-Pyrrolo[2,3-c]quinoline, 2-ethyl-1-methyl- 96312-85-5, 3H-Pyrrolo[2,3-c]quinoline, 1,2-dimethyl- 97811-78-4, 3H-Pyrrolo[2,3-c]quinoline, 2-phenyl- 98655-34-6, 7H-Benz[6,7]indolo[2,3-c]quinoline, 12,13-dihydro-100148-24-1, 3H-Pyrrolo[2,3-c]quinoline, 1-methyl-2-phenyl-104577-83-5, 3H-Pyrrolo[2,3-c]quinoline, 2-phenyl-, picrate 104578-01-0, 3H-Pyrrolo[2,3-c]quinoline, 1,2-diphenyl- (preparation of)
 RN 207-90-9 CAPLUS
 CN 7H-Benz[6,7]indolo[2,3-c]quinoline (7CI, 8CI, 9CI) (CA INDEX NAME)



RN 232-86-0 CAPLUS
 CN 3H-Pyrrolo[2,3-c]quinoline (7CI, 8CI, 9CI) (CA INDEX NAME)



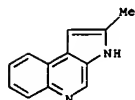
RN 88550-77-0 CAPLUS
 CN 3H-Pyrrolo[2,3-c]quinoline, 2-methyl- (7CI, 9CI) (CA INDEX NAME)



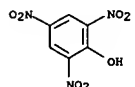
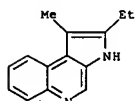
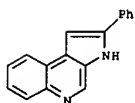
L11 ANSWER 143 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

RN 88550-78-1 CAPLUS
CN 3H-Pyrrolo[2,3-c]quinoline, 2-methyl-, picrate (7CI) (CA INDEX NAME)

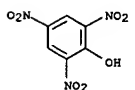
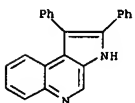
CM 1

CRN 88550-77-0
CMF C12 H10 N2

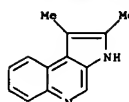
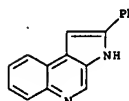
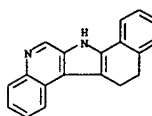
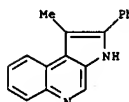
CM 2

CRN 88-89-1
CMF C6 H3 N3 O7RN 95493-33-7 CAPLUS
CN 3H-Pyrrolo[2,3-c]quinoline, 2-ethyl-1-methyl-, picrate (7CI) (CA INDEX NAME)RN 96312-85-5 CAPLUS
CN 3H-Pyrrolo[2,3-c]quinoline, 1,2-dimethyl-, picrate (7CI) (CA INDEX NAME)L11 ANSWER 143 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)
CMF C17 H12 N2

CM 2

CRN 88-89-1
CMF C6 H3 N3 O7RN 104578-01-0 CAPLUS
CN 3H-Pyrrolo[2,3-c]quinoline, 1,2-diphenyl-, picrate (7CI) (CA INDEX NAME)

L11 ANSWER 143 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

RN 97811-78-4 CAPLUS
CN 3H-Pyrrolo[2,3-c]quinoline, 2-phenyl-, picrate (7CI) (CA INDEX NAME)RN 98655-34-6 CAPLUS
CN 7H-Benz[6,7]indolo[2,3-c]quinoline, 12,13-dihydro-, picrate (7CI) (CA INDEX NAME)RN 100148-24-1 CAPLUS
CN 3H-Pyrrolo[2,3-c]quinoline, 1-methyl-2-phenyl-, picrate (7CI) (CA INDEX NAME)RN 104577-83-5 CAPLUS
CN 3H-Pyrrolo[2,3-c]quinoline, 2-phenyl-, picrate (7CI) (CA INDEX NAME)

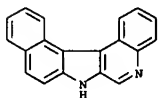
CM 1

CRN 97811-78-4

L11 ANSWER 144 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN

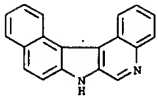
AN 1962:79398 CAPLUS
DN 56:79398
OREF 56:15493b-1,15494a-b
TI Carcinogenic nitrogen compounds. XXXII. Synthesis of new highly active benzopyridocarbazoles
AU Buu-Hoi, Ng. Ph.; Perin, F.; Jacquignon, P.
SO Journal of the Chemical Society, Abstracts (1962) 146-50
CODEN: JCSAAZ; ISSN: 0590-9791
DT Journal
LA Unavailable
AB cf. CA 56, 11569d.-The synthesis was described of a new series of benzopyridocarbazoles and related compds., some of which display high carcinogenic activity. An isomer effect was noted in the indolization of the various quinolyldihydrazones investigated. 3-Quinolyldihydrazine prepared from 3-aminoquinoline m. 180.5° (C6H6). Similarly 5-quinolyldihydrazine m. 163° (C6H6). 7-Nitroquinoline was prepared from m-nitroaniline, the product containing 60% 5-nitroquinoline and 40% 7-nitroquinoline; 7-aminoquinoline which served in the preparation of 7-quinolyldihydrazine formed prisms, m. 97° (cyclohexane). α-Tetralone 7-quinolyldihydrazine (yellowish needles, m. 212°) (2 g.) and 4 g. freshly fused ZnCl₂ heated 45 min. at 280-300°, triturated, washed, and recrystd. gave 0.7 g. 1,2-benzopyrido [2',3':5,6]carbazole, m. 229°; picrate m. 294° (PhCl). β-Tetralone 7-quinolyldihydrazine (2 g.) heated 10 min. at 100° with 5 cc. AcOH and 1 cc. H₂SO₄, cooled, basified, and the product recrystd. gave 1 g. 1,2-dihydro-5,6-benzopyrido [2',3':3,4]carbazole (I), m. 222°; picrate m. 257°. I (0.5 g.) and 0.5 g. 5% Pd-C heated at 310-20°, and the product sublimed over Pd-C gave 0.3 g. 5,6-benzopyrido [2',3':3,4]carbazole, m. 244°; picrate m. 232° (decomposition). 1,2,3,4-Tetrahydro-1-oxophenanthrene 7-quinolyldihydrazine (m. 233°) (1 g.) treated with 2 g. ZnCl₂, followed by dehydration and sublimation gave 0.5 g. naphtho [2',1':1,2]pyrido [2'',3'':5,6]carbazole, m. 322° (PhMe); picrate, orange prisms, m. 345° (decomposition) (cyclohexanone). Cyclization of crude 1,2,3,4-tetrahydro-4-oxophenanthrene 7-quinolyldihydrazine by means of ZnCl₂ gave naphtho [1',2':1,2]pyrido [2'',3'':5,6]carbazole, m. 232°; picrate m. 292° (decomposition). α-Tetralone 8-quinolyldihydrazine, m. 210°, underwent cyclization with ZnCl₂ to 7,8-benzopyrido [3',2':1,2]carbazole, m. 193°, recovered unchanged when treated with Pd-C and H, and gave a picrate as yellow prisms, m. 286°. α-Tetralone 8-quinolyldihydrazine, leaflets, m. 158°, yielded on treatment with ZnCl₂ 6''-methyl-7,8-benzopyrido [3',2':1,2]carbazole, leaflets, m. 192°; picrate, yellow prisms, m. 299° (decomposition) (alc.). Treatment of the crude β-tetralone 8-quinolyldihydrazine with H₂SO₄-AcOH gave 7,8-dihydro-6''-methyl-5,6-benzopyrido [2',3':1,2]carbazole (II), leaflets, m. 210° (alc.). Sublimation of II over Pd-C gave 6''-methyl-5,6-benzopyrido [2',3':1,2]carbazole, m. 256°; yellow picrate m. 345°. 1,2,3,4-Tetrahydro-1-oxophenanthrene 8-quinolyldihydrazine as leaflets, m. 151°, was cyclized with ZnCl₂ to give naphtho [2',1':1,2]pyrido [3'',2'':7,8]carbazole, m. 253° (PhCl); picrate m. 345°. 1,2,3,4-Tetrahydro-4-oxophenanthrene 8-quinolyldihydrazine, lemon-yellow needles, m. 135°, underwent similar cyclization to give naphtho [1',2':7,8]pyrido [3'',2'':1,2]carbazole, m. 191°; picrate, orange prisms, m. 298° (decomposition). Indolization of crude β-tetralone 5-quinolyldihydrazine with H₂SO₄-AcOH gave 7,8-dihydro-5,6-benzopyrido [3',2':1,2]carbazole

L11 ANSWER 144 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)
 (III), m. 344; picrate m. 282 (decompn.). Sublimation of
 III over Pd-C gave 5,6-benzopyrido[3',2':1,2]carbazole, m.
 368 (alc.); picrate m. 309 (decompn.). Crude
 1,2,3,4-tetrahydro-4-oxophenanthrene 3-quinolyldiazone gave
 5,6-dihydronaphtho-[1',2':7,8]pyrido[2'',3'':1,2]carbazole, m.
 308; picrate m. 292 (decompn.). Dehydrogenation of the
 last compd. gave naphtho[1',2':7,8]pyrido[2'',3'':1,2]carbazole, m.
 319 (PhMe); picrate, yellow prisms, m. 327.
 α -Tetralone 3-quinolyldiazone, m. 182 on attempted cyclization
 with H₂SO₄-AcOH gave unchanged material. Treatment with ZnCl₂ gave
 1,2:6,7-dibenzo- β -carboline, m. 341 (Me₂CO); picrate, prisms,
 m. 298 (decompn.). Cyclization of the crude β -tetralone
 3-quinolyldiazone with H₂SO₄-AcOH gave 6,7-dihydro-1,2:8,9-dibenzo-
 β -carboline (IV) leaflets, m. 303; picrate, orange prisms, m.
 313 (decompn.). Dehydrogenation of IV over Pd-C gave
 1,2:8,9-dibenzo- β -carboline, leaflets, m. 320 (alc.); picrate
 m. 280 (decompn.). 1,2,3,4-Tetrahydro-1-oxophenanthrene
 3-quinolyldiazone formed needles, m. 251 (xylene), and
 cyclization with ZnCl₂ gave 1,2-benzonaphtho[1',2':6,7]- β -carboline,
 prisms, m. 366; picrate m. 277 (alc.). Cyclization of
 crude 1,2,3,4-tetrahydro-4-oxophenanthrene 3-quinolyldiazone with ZnCl₂
 gave 1,2-benzonaphtho[2',1':6,7]- β -carboline, m. 307 (xylene);
 picrate, orange-yellow prisms, m. 287 (decompn.).
 IT 194-61-6, 7H-Benz[4,5]indolo[2,3-c]quinoline 208-02-6,
 13H-Naphth[1',2':6,7]indolo[2,3-c]quinoline 237-37-6,
 15H-Naphth[2',1':6,7]indolo[2,3-c]quinoline 98655-33-5,
 7H-Benz[4,5]indolo[2,3-c]quinoline, 8,9-dihydro- 103695-79-0,
 7H-Benz[4,5]indolo[2,3-c]quinoline, picrate 103695-81-4,
 7H-Benz[6,7]indolo[2,3-c]quinoline, picrate 103864-65-9,
 7H-Benz[4,5]indolo[2,3-c]quinoline, 8,9-dihydro-, picrate
 104979-17-1, 15H-Naphth[2',1':6,7]indolo[2,3-c]quinoline, picrate
 107782-83-2, 13H-Naphth[1',2':6,7]indolo[2,3-c]quinoline, picrate
 (preparation of)
 RN 194-61-6 CAPLUS
 CN 7H-Benz[4,5]indolo[2,3-c]quinoline (7CI, 8CI, 9CI) (CA INDEX NAME)

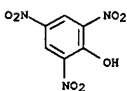


RN 208-02-6 CAPLUS
 CN 13H-Naphth[1',2':6,7]indolo[2,3-c]quinoline (7CI, 8CI, 9CI) (CA INDEX NAME)

L11 ANSWER 144 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

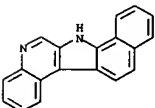


CM 2
 CRN 88-89-1
 CMF C6 H3 N3 O7

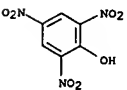


RN 103695-81-4 CAPLUS
 CN 7H-Benz[6,7]indolo[2,3-c]quinoline, picrate (7CI) (CA INDEX NAME)

CM 1
 CRN 207-90-9
 CMF C19 H12 N2

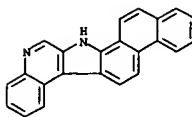


CM 2
 CRN 88-89-1
 CMF C6 H3 N3 O7

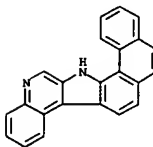


RN 103864-65-9 CAPLUS

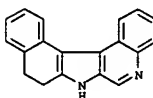
L11 ANSWER 144 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



RN 237-37-6 CAPLUS
 CN 15H-Naphth[2',1':6,7]indolo[2,3-c]quinoline (7CI, 8CI, 9CI) (CA INDEX NAME)



RN 98655-33-5 CAPLUS
 CN 7H-Benz[4,5]indolo[2,3-c]quinoline, 8,9-dihydro- (7CI) (CA INDEX NAME)

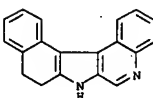


RN 103695-79-0 CAPLUS
 CN 7H-Benz[4,5]indolo[2,3-c]quinoline, picrate (7CI) (CA INDEX NAME)

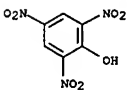
CM 1
 CRN 194-61-6
 CMF C19 H12 N2

L11 ANSWER 144 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)
 CN 7H-Benz[4,5]indolo[2,3-c]quinoline, 8,9-dihydro-, picrate (7CI) (CA INDEX NAME)

CM 1
 CRN 98655-33-5
 CMF C19 H14 N2

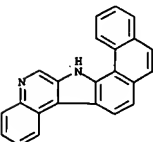


CM 2
 CRN 88-89-1
 CMF C6 H3 N3 O7



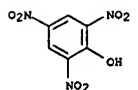
RN 104979-17-1 CAPLUS
 CN 15H-Naphth[2',1':6,7]indolo[2,3-c]quinoline, picrate (7CI) (CA INDEX NAME)

CM 1
 CRN 237-37-6
 CMF C23 H14 N2

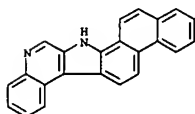


CM 2
 CRN 88-89-1

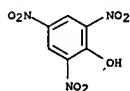
L11 ANSWER 144 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)
CMF C6 H3 N3 O7



RN 107782-83-2 CAPLUS
CN 13H-Naphth[1',2':6,7]indolo[2,3-c]quinoline, picrate (7CI) (CA INDEX NAME)
CM 1
CRN 208-02-6
CMF C23 H14 N2



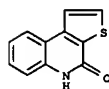
CM 2
CRN 88-89-1
CMF C6 H3 N3 O7



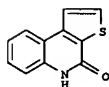
L11 ANSWER 146 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN
AN 1961:81733 CAPLUS
DN 55:81733
OREF 55:15491b-1
TI Quinoline series. II. Reaction between quinaldine and sulfuric acid
AU Skidmore, S.; Tidd, E.
CS Roy, Tech. Coll., Salford, UK
SO Journal of the Chemical Society, Abstracts (1961) 1098-102
CODEN: JCSAAZ; ISSN: 0590-9791
DT Journal
LA Unavailable
AB cf. CA 54, 540d. By reactions between quinaldine (I) and either H2SO4 or S, a pyrroloquinoline (II) was obtained. Evidence was presented in support of this structure and a possible general synthesis of pyrrolo[1,2-a]quinolines by cyclization of quinolypropanes described. The preparation and reactions of intermediates in the synthesis were reexamined.
I (28 g.) and 6.6 g. concentrated H2SO4 refluxed 5 hrs., the product treated with excess 15% NaOH, and steam distilled gave 15.2 g. unchanged I. The 9.3 g. residue in 200 ml. C6H6 extracted with 0.1N HCl, the exts. basified, and the precipitate triturated with Me2CO gave 1.3 g. 1,2-di-2-quinolyethane (III), m. 163° (aqueous alc.); picrate, orange needles, m. 267° (decomposition). The mother liquor afforded 0.5 g. II, m. 197°; picrate m. 265°; methiodide m. 219° (alc.). The residue consisted of 2.6 g. viscous material. I (29 g.) and 3.2 g. S heated 4 hrs. at the b.p., the solution steam distilled, and the residue dissolved in 5N HCl, the filtrate basified, and the bases extracted gave diquinolyethane, m. 164° and II. II (0.5 g.) in 20 ml. C5H5N and H2O refluxed 2 hrs. with 2 g. KMnO4 gave quinaldic acids, m. 153°. II (0.078 g.) in 20 ml. alc. shaken 2 hrs. with H and 1 ml. Raney Ni in alc. gave 0.069 g. 1,2,3,4,5-hexahydro-1,2-di-2-quinolylpyrrolo[1,2-a]quinoline, m. 187°; yellow HCl salt. III (0.57 g.) and 0.44 g. SeO2 in 20 ml. dioxane refluxed 2 hrs. gave 1,2-di-2-quinolyethylene (IV), yellow needles, m. 189° (MeOH); methiodide m. 212-13° (H2O). I (0.3 g.), 0.2 g. IV, and 0.13 g. I.HCl heated 3 hrs. at 100° in a sealed tube gave 0.11 g. 1,2,3-tri-2-quinolylpropane (V), m. 136° (ligroine). Alternatively, BzOH was used as catalyst at 165°. V (0.5 g.) and 0.1 g. S heated 1 hr. at 210° gave 0.32 g. II. 2-Phenyl-1,3-di-2-quinolylpropane (VI) (1.87 g.) and 0.32 g. S heated 1 hr. at 210° and the product chromatographed on Al2O3 gave 0.82 g. 2-phenyl-1-(2-quinolyl)pyrrolo[1,2-a]quinoline, m. 154-6° (aqueous Me2CO). VI (1.37 g.) in 4 ml. AcOH and 3.2 g. Hg(OAc)2 in 4 ml. AcOH and 35 ml. H2O refluxed 3 hrs. gave 0.46 g. base (VII), m. 154° (alc.). The original aqueous filtrate containing the Hg salts heated and H2S passed into the solution gave a small amount of VII. VII seemed identical with the product obtained by dehydrogenation of VI with S; red methiodide, m. 228-9° (alc.-Et2O). I (5 g.) and 5 g. quinoline-2-aldehyde refluxed 30 hrs. in 1:4 aqueous alc. gave 4.1 g. 1,2-di-2-quinolylethanol (VIII), plates, m. 165°, and the alc.-insol. material gave 1 g. 1,2-di-2-quinolylethane-1,2-diol (IX), plates, m. 210° (HCONMe2). IX (0.10 g.) and 0.5 g. HIO4 in 20 ml. H2O kept 0.5 hr. at 80° and the product treated with 2,4-dinitrophenylhydrazine gave 0.07 g. quinoline-2-aldehyde 2,4-dinitrophenylhydrazone, m. 247-8°. 1,2-Dibromo-1,2-di-2-quinolylethane (0.3 g.) refluxed 5 hrs. with 5 g.

KOH

L11 ANSWER 145 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN
AN 1961:81734 CAPLUS
DN 55:81734
OREF 55:154911,15492a
TI Reactions of organic azides. X. Schmidt reaction with 3'-oxoindeno[2',1':2,3]thiophene: the structure of the product
AU Arcus, C. L.; Barrett, G. C.
CS Battersea Coll. Technol., London
SO Journal of the Chemical Society, Abstracts (1961) 1408-9
CODEN: JCSAAZ; ISSN: 0590-9791
DT Journal
LA Unavailable
AB cf. CA 54, 226501. Thieno[2',3':3,4]-2-quinolone (I) (0.30 g.) heated 3 hrs. with 2.97 g. KMnO4 in 30 ml. H2O gave 0.20 g. unchanged I. The filtrate acidified and extracted with Et2O gave 0.07 g. buff solid, m. 178-81°, which contained N and S; the solid was not further investigated. An identical mixture heated 3.5 hrs. at 250° gave only I. Raney Ni C (1 g.) and 0.10 g. I refluxed 6 hrs. in 25 ml. m-xylene gave 0.07 g. 4-ethylcarbostyryl, m. 194.5-5.5° (heptane). Thus, I was reductively desulfurized.
IT 35621-15-9, Thieno[2,3-c]quinolin-4(5H)-one (preparation of)
RN 35621-15-9 CAPLUS
CN Thieno[2,3-c]quinolin-4(5H)-one (6CI, 9CI) (CA INDEX NAME)

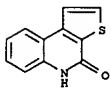


L11 ANSWER 146 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)
in H2O and dioxane gave 1,2-di-2-quinolylacetylene, m. 182° (dioxane). VIII (0.31 g.) and 0.12 g. BzOH heated 3 hrs. at 100° in a sealed tube gave 0.13 g. III. Treatment of the residue with hot N HCl and basification gave 0.14 g. 1,2-di-2-quinolylethanone (X), m. 212° (ligroine). IX (0.54 g.) and 5 ml. AcOH refluxed 15 min. gave 0.07 g. III and a red HCl salt which afforded 0.27 g. X.
IT 35621-15-9, Thieno[2,3-c]quinolin-4(5H)-one (preparation of)
RN 35621-15-9 CAPLUS
CN Thieno[2,3-c]quinolin-4(5H)-one (6CI, 9CI) (CA INDEX NAME)



L11 ANSWER 147 OF 162 CAPLUS COPYRIGHT 2005 ACS ON STN
 AN 1960:118316 CAPLUS
 DN 54:118316
 OREF 54:226501,22651a-1,22652a
 TI Reactions of organic azides. IX. Ring expansion leading to 2-phenyl(7
 iso)quinolino- and -(7 iso)quinolino(4',3':4,5)thiazole and (7
 iso)quinolino(3',4':2,3)thiophene-attempted rearrangements of fluorenone
 hydrazone
 AU Arcus, C. L.; Barrett, G. C.
 CS Battersea Coll. Technol., London
 SO Journal of the Chemical Society, Abstracts (1960) 2098-2102
 CODEN: JCSAA2; ISSN: 0590-9791
 DT Journal
 LA Unavailable
 OS CASREACT 54:118316
 AB cf. CA 52, 14575d. 3'-oxo- (I), 3'-hydroxy- (II), and
 3'-benzylidene-2-phenylindeno(1',2':4,5)thiazole (III),
 3'-benzylideneindeno(1',2':4,5)thiazole (IV), and 3'-oxo- (V) and
 3'-hydroxyindeno(2',1':2,3)thiophene (VI) were subjected to the action of
 HN3 in the presence of strong acid. I and V and VI underwent
 ring-expansion to the oxoquinolinothiazole and -thiophene and the
 quinolinothiazole, resp. (or to the corresponding isoquinolines).
 Fluorenone hydrazone (VII) was not converted into phenanthridine by
 reaction with polyphosphoric acid or by diazotization.
 2-Phenylindeno(1',2':4,5)-thiazole (5 g.) heated 2.75 hrs. at
 220-40° in a sealed tube with 10 g. SeO2 in 12 ml. H2O, the product
 sublimed at 160°/0.1 mm. to remove BzOH, and the residue recrystd.
 gave 1.57 g. I, orange needles, m. 174-5° (alc.). I (0.39 g.)
 refluxed 1.5 hrs. with (iso-PrO)3Al, poured into cold 2N H2SO4, and the
 precipitate collected gave 0.33 g. II, yellow needles, m. 187° (heptane).
 Br (3 g.) added during 50 min. to 0.7 g. K chlorate in 5 g.
 inden-1,3-dione (VIII), 12 ml. dioxane, and 3 ml. H2O at 78-9°
 while being illuminated by a 60 w. lamp., the mixture stirred a further
 40 min., cooled, extracted, with Et2O, washed, and evaporated gave 2.55 g.
 2-bromoiden-1,3-dione (IX), m. 115-18° (heptane). VIII (23.5 g.)
 in 300 ml. warm CCl4, cooled to room temperature, treated during 2 hrs.
 with 7.8 g. Br in 20 ml. CCl4, and distilled gave 13.6 g. IX. IX (2 g.) in 40 ml.
 Et2O refluxed during 0.5 hr. with addition of 0.55 g. thioformamide in
 25 ml. Et2O, the mixture refluxed 1 hr., kept 2.5 days, the solid ground with
 0.5N NaOH, and the residue sublimed gave product, m. 119-19.5°. IX (0.5
 g.) in 25 ml. Et2O added during 0.5 hr. to 0.31 g. thiobenzamide in 10
 ml. Et2O, the mixture heated a further 15 min., cooled, and recrystd. gave
 0.21 g. 3,5-diphenyl-1,2,4-thiadiazole, yellow needles, m. 86.5-7.0°.
 Indeno(1',2':4,5)thiazole (3.22 g.) and 2.03 g. BzH in 20 ml. MeOH left
 60 hrs. with 8 g. KOH in 50 ml. MeOH, 10 ml. MeOH added, and the oil
 solidified gave 3.43 g. IV, yellow needles, m. 70° (MeOH).
 2-Phenylindeno(1',2':4,5)thiazole (1 g.) and 0.44 g. BzH in 20 ml. MeOH
 with 8 ml. of the above KOH solution gave in 20 min. 1.24 g. III, golden
 needles, m. 159.5-60.0° (MeOH). N-(p-Toluenesulfonyl)anthranilic
 acid (58 g.) and 60 ml. SOCI2 refluxed 1.5 hrs., excess reagent
 distilled,

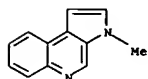
L11 ANSWER 147 OF 162 CAPLUS COPYRIGHT 2005 ACS ON STN (Continued)



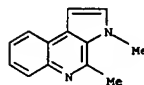
L11 ANSWER 147 OF 162 CAPLUS COPYRIGHT 2005 ACS ON STN (Continued)
 and the product recrystd. gave 59 g. N-(p-toluenesulfonyl)anthraniloyl
 chloride (XI), prisms, m. 126.5-7.5°. Anhyd. SnCl4 (41 g.) in 50
 ml. CS2 added during 1 hr. to 48 g. X in 24 g. thiophene and 100 ml. CS2
 at 30°, the mixt. stirred 1 hr., the CS2 soln. decanted, the
 residual tar repeatedly extd. with mixts. of Et2O and dil. HCl, the CS2
 soln. washed, the combined Et2O solns. washed with 0.5N NaOH, the aq.
 alk. soln. sepd., dild., and acidified gave 46 g. o-(p-
 toluenesulfonylamido)phenyl 2-thienyl ketone (XI), yellow needles, m.
 124.5-5.5° (alc.). XI was converted into the amino ketone-HCl and
 thence into V, yellow needles, m. 107-9°. V (3.36 g.) with
 (iso-PrO)3Al gave 2.56 g. VI, plates, m. 110.5° (heptane), m.
 116° (alc.). C. NaN3 (1 g.) added during 50 min. to a stirred soln.
 of 1.58 g. I in 16 ml. 98% H2SO4 at 35-40°, the mixt. stirred 2
 hrs. at 40°, poured into ice H2O, after 2 hrs. the solid filtered
 off, ground with 2N NaOH, sublimed at 120°/0.1 mm. and
 180°-200°/0.1 mm., and washed and sepd. gave 0.82 g.
 2-phenyl(7 iso)quinolino(4',3':4,5)thiazole, yellow needles, m.
 376° (PhNO2). NaN3 (3.58 g.) and 18 ml. H2SO4 added during 1 hr.
 to 4.93 g. V in 55 g. CCl3CO2H at 50-5°, the mixt. stirred 1.5 hrs.
 longer, poured into H2O, and sublimed gave 2.59 g. (7
 iso)quinolino(3',4':2,3)thiophene, yellow prisms, m. 291° (PhNO2).
 H2SO4 (1 ml.) added during 10 min. to a stirred suspension of 0.20 g.
 NaN3 in 6 ml. CHCl3 at 0°, the temp. raised to 25°, 0.30 g. III
 added during 1 hr., the whole stirred 1 hr., poured onto ice, the next
 day the solid collected, shaken with N NaOH and Et2O, and crystd. gave 0.20
 g. material. The filtrate shaken with CHCl3 afforded further product. The
 combined crops recrystd. gave 0.25 g. 2-phenyl(7
 iso)quinolino(4',3':4,5)thiazole, prisms, m. 147°. Treatment of VI
 as in the last expt. gave a black product and no base. Reaction with
 NaN3, CCl3CO2H, and CHCl3 gave a dark powder, m. about 320°, which
 did not contain N. IV was recovered after treatment with NaN3 in CHCl3
 and H2SO4. III was recovered after treatment with NaN3, H2SO4, and CHCl3
 at 50°. VII (4 g.) stirred into 40 g. polyphosphoric acid at
 130°, the mixt. kept 10 min., poured into H2O, and the ppt.
 recrystd. gave violet-red needles, m. 272-3° (PhMe). VII (4 g.) in
 55 ml. N HCl at 0° treated with 1.45 g. PhNO2 in 5 ml. H2O
 (frothing occurred), the mixt. left 10 min. at 0°, poured into 60
 ml. refluxing 2N H2SO4 then refluxed 10 min., cooled, and the product
 collected gave 0.95 g. fluorenone azine, m. 272° (C5H5N). The
 mother liquor after dildn. and filtration gave 1.33 g. fluorenone, m.
 79-80°.
 IT 35621-15-9, Thieno[2,3-c]quinolin-4(5H)-one
 (preparation of)
 RN 35621-15-9 CAPLUS
 CN Thieno[2,3-c]quinolin-4(5H)-one (6CI, 9CI) (CA INDEX NAME)

L11 ANSWER 148 OF 162 CAPLUS COPYRIGHT 2005 ACS ON STN
 AN 1960:97716 CAPLUS
 DN 54:97716
 OREF 54:18569f-1,18570a-h
 TI Structure of echitamine
 AU Conroy, Harold; Bernasconi, Raymond; Brook, Peter R.; Ikan, Raphael;
 Kurtz, Roberta; Robinson, Keith W.
 CS Yale Univ.
 SO Tetrahedron Letters (1960), (No. 6), 1-9
 CODEN: TELEAY; ISSN: 0040-4039
 DT Journal
 LA Unavailable
 GI For diagram(s), see printed CA issue.
 AB Accumulated data favor formulation of echitamine (I) in compatibility
 with the theory of alkaloid biogenesis and in close resemblance to
 intermediates of the strychnine-vomicine group. Echitamine chloride
 (II), C22H29ClN2O4, v 1740, shows no infrared N-H peak and no C:N+;
 11, and treatment with aqueous NaOH gives I, C22H28N2O4, readily crystallized as
 the C6H6 solvate, m. 139-40° (transition at 98-101°). The 60 Mc.
 high resolution nuclear magnetic resonance (n.m.r.) spectrum gives
 intense singlets at τ 6.30, 7.76 for O-Me and N-Me, indicating that I is not a
 quaternary ammonium hydroxide; a doublet at τ 8.39 for allylic C-Me; a
 1,3,3,1 sym. quartet at τ 4.56 for the olefinic protons; and a
 one-proton singlet near τ 5.1 ascribed to a single OH group.
 Formation of I α -methiodide, m. 226-9° (decomposition) (absolute
 alc.), with 2 N-Me groups indicates normal behavior as a tertiary base.
 The reversion of I to II is sufficiently slow at 25° so that
 titration of I gives a pKa 7.8 in 60% aqueous alc. and this hysteresis
 is well accommodated by the equilibrium I \rightleftharpoons II. II treated with Me3COK
 in absolute Me3CO yields alloechitamine (III), C21H26NO3, m. 191° (MeOH), v
 1736, 1689 cm.-1, n.m.r. spectra showing presence of O-Me, N-Me, and
 MeCH:
 groups; MeI salt, showing loss of 1689 cm.-1 peak due to transannular
 interaction. I in alc. hydrogenated with Pt gives a high yield of
 echitinolide (IV), C21H26N2O3, m. 140-4° (Et2O), m. 154-7°
 (C6H6), pKa, 5.4 (60% alc.), n.m.r. τ 7.53 (singlet, N-Me), 7.76
 (singlet, C-Me), 8.48 (doublet, C-Me), v 1742 cm.-1; O-monoacetate, m.
 210-14°, 1754 cm.-1 IV heated with HCl gives an isomer,
 isoechoitinolide (V), m. 149-54° (Et2O), v 1754 cm.-1 I and II
 show almost identical ultraviolet absorption (λ 235, 295 m μ (log
 ϵ 3.93, 3.55)), even in strongly alkaline solution IV and V absorb at
 longer wave lengths [λ 248, 309 m μ (log ϵ 3.91, 3.55)]
 but acidification causes downward displacement. All compds. with low
 wave length absorption have Na equatorial with respect to the C carbocyclic
 six-membered ring, whereas absorption above 240 m μ (and 300 m μ) can
 be consistently related with structures in which Na has axial
 conformation. The Hofmann degradation of IV MeI salt gives the methine,
 C22H30N2O4, reduced by Zn-HCl to the lactone, deoxynodihydroechitamine
 methine, 2247, 307 m μ (log ϵ 3.97, 3.59), unchanged in
 acidic solution The Zn dust and Se degradations leading to echitamine
 and dimethylpyrrolo-2',3',3',4'-quinoline might proceed through the
 intermediate

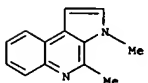
L11 ANSWER 148 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)
 (VI) which could arise from the iminium cation of IV by 1,2 migration of the indoline α -C. It is suggested that the specific biogenetic derivation of I involves the precursor (VII) in Mannich Cyclization. (CA 53, 22033i). A close relation to the quaternary alkaloid C-fluorocurarine is apparent, and the noncyclized system retaining the CO₂H residue is present in corynoxine and rhyncophylline.
 IT 6878-06-4, Echitamyrene (preparation of)
 RN 6878-06-4 CAPLUS
 CN Echitamyrene (8CI) (CA INDEX NAME)



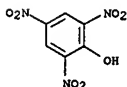
L11 ANSWER 149 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 1960:39195 CAPLUS
 DN 54:39195
 OREF 54:7763b-f
 TI Echitamine
 AU Birch, A. J.; Hodson, H. F.; Smith, G. F.
 CS Univ. Manchester, UK
 SO Proc. Chem. Soc. (1959) 224
 DT Journal
 LA Unavailable
 AB Some findings in an investigation of echitamine chloride (I), C₂₂H₂₉N₂O₄Cl, the alkaloid of Alstonia scholaris, were reported. Kuhn-Roth oxidation of I gave an average 2.6% C-Me and ozonolysis gave 25% AcH.
 25% AcH. Basification of aqueous I gave quant. amorphous base A (II), C₂₂H₂₈N₂O₄, of uncertain structure, reconverted into I by aqueous HCl. II hydrogenated with Pt₂O in EtOH (1 mole H absorbed) gave crystalline tertiary base B (III), C₂₂H₂₈N₂O₃, m. 154-9° and 185-7°, pKa 5.5 in 60% aqueous EtOH, λ 2480 and 3090 Å. (log ϵ 3.91 and 2.35), changing to 2380 and 2970 Å. (log ϵ 3.85 and 3.45) in alc. HCl. I could not be hydrogenated in EtOH. I hydrogenated in AcOH containing some HCl with PtO₂ absorbed 5-6 moles H slowly and continuously to give an amorphous base showing no selective ultraviolet absorption. III hydrogenated in AcOH over PtO₂ (1 mole H absorbed) gave 60% base C (IV), C₂₂H₃₀N₂O₃, m. 115-20° and 160-3°, pKa 5.5 in 60% aqueous EtOH, its ultraviolet absorption almost identical with that of II. III on ozonolysis gave 46% AcH, but IV gave none. IV gave AcOH and EtCH₂CO₂H by the modified Kuhn-Roth method (Garbers, et al., C.A. 48, 10491g). A quant. Kuhn-Roth determination with IV gave 6.2% C-Me. I treated with Na in dry liquid NH₃ was converted into a mixture of bases, showing an ultraviolet spectrum characteristic of 2,3-disubstituted indoles. Distillation of III with Zn dust gave 1',2-dimethylpyrrolo [2',3':3,4]quinoline, C₁₃H₁₂N₂, m. 124-6°, also obtained by the addition of LiMe to 1'-methylpyrrolo[2',3':3,4]quinoline, followed by oxidation with permanganate; picrate m. 241°. Partial structures were proposed for I, III, and IV.
 IT 108874-19-7, 3H-Pyrrolo[2,3-c]quinoline, 3,4-dimethyl-857204-93-4, 3H-Pyrrolo[2,3-c]quinoline, 3,4-dimethyl-, picrate (preparation of)
 RN 108874-19-7 CAPLUS
 CN 3H-Pyrrolo[2,3-c]quinoline, 3,4-dimethyl- (6CI) (CA INDEX NAME)



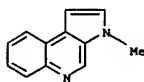
L11 ANSWER 149 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)
 RN 857204-93-4 CAPLUS
 CN 3H-Pyrrolo[2,3-c]quinoline, 3,4-dimethyl-, picrate (6CI) (CA INDEX NAME)
 CM 1
 CRN 108874-19-7
 CMF C13 H12 N2



CM 2
 CRN 88-89-1
 CMF C6 H3 N3 O7



L11 ANSWER 150 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 1960:11598 CAPLUS
 DN 54:11598
 OREF 54:2385c-d
 TI Identity of the dehydrogenation product of tetrahydroechitamine
 AU Govindachari, T. R.; Rajappa, S.
 CS Presidency Coll., Madras, India
 SO Chemistry & Industry (London, United Kingdom) (1959) 1154
 CODEN: CHINAG; ISSN: 0009-3068
 DT Journal
 LA Unavailable
 AB AgO₂C oxidation of calycanthine gave 1'-methylpyrrolo[2',3':3,4]quinoline, which was shown, by mixed m.p. of the picrates, infrared spectra in CHCl₃, and ultraviolet spectra in neutral and acid solns., to be identical with echitamyrene, obtained by Se dehydrogenation of tetrahydroechitamine (I) (cf. preceding abstract). This was the 1st instance of an indole alkaloid derived from tryptamine and shikimic-prephenic acid moieties yielding a dehydrogenation product of this type. The formula for I was C₂₂H₂₈-3003N₂; Zerewitinoff estimation indicated 2 active H's (1 NH, 1 OH).
 OH). Thus the formula of echitamine chloride was revised to C₂₂H₂₇O₃N₂Cl.H₂O.
 IT 6878-06-4, 3H-Pyrrolo[2,3-c]quinoline, 3-methyl-, echitamyrene (preparation of)
 RN 6878-06-4 CAPLUS
 CN Echitamyrene (8CI) (CA INDEX NAME)



(structure of

L11 ANSWER 151 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN

AN 1958:25581 CAPLUS

DN 52:25581

OREF 52:4658f-1,4659a-1

TI Triazaphenanthrenes. II. Derivatives of

10-phenyl-1,2,9-triazaphenanthrene

AU Atkinson, C. M.; Matlocks, A. R.

SO Journal of the Chemical Society, Abstracts (1957) 3722-6

CODEN: JCSAAZ; ISSN: 0590-9791

DT Journal

LA Unavailable

OS CASREACT 52:25581

AB A preparative route to 4-acetyl-3-amino-2-phenylquinoline (I) was developed. Diazotization of I in HCl and subsequent cyclization gave chiefly 4-acetyl-3-chloro-2-phenylquinoline (II), with 10% of the hydroxytriazaphenanthrene (III); an 80% yield of III was obtained by cyclization in an alkaline medium.

4-Amino-10-phenyl-1,2,9-triazaphenanthrene

(IV) formed a monomethiodide (V) which was biologically inactive.

2-Phenyl-3-phthalimidoquinoline-4-carboxylic acid (VI) (40 g.) refluxed

0.5 hr. with 400 cc. 50% volume/volume H₂SO₄ gave

3-amino-2-phenylquinoline

(VII), m. 119°. Neutralization of the mother liquors and reexn.

with CHCl₃ gave 3-amino-2-phenylquinoline-4-carboxylic acid (VIII), m.

224°. VI was recovered after 2 hrs. heating with 20% or 75% NaOH.

VII was also formed by similar treatment of 2-phenyl-3-

phthalimidoquinoline (IX). VI (2.5 g.) and 15 cc. H₃PO₄ heated 1 hr. at215° gave IX, m. 249-50° (C₆H₆). The presence of VII in the

aqueous mother liquors was indicated by its fluorescence and by the

sublimate of phthalic anhydride in the condenser. VII (18 g.) in 45 cc. H₂O and 75cc. concentrated HCl diazotized at 0° with 6 g. NaNO₂, the solution

treated

at 0° in 54 g. SnCl₂ and 54 cc. concentrated HCl and 100 cc. H₂O, the

mixture kept 0.5 hr. at 0°, allowed to come to room temperature

overnight,

diluted to 1500 cc., partially neutralized with 25 g. NaOH in 50 cc. H₂O,

the Sn salts removed as the sulfide, and the precipitate collected, then

digested

with refluxing H₂O, the combined filtrates concentrated to 350 cc., and

then

cooled gave 3-hydrazino-2-phenylquinoline-HCl (X), m. 255°

(decomposition). The hydrazone of EtAc (XI) (16 cc.) prepared from 10

g. of X by

refluxing 5 min. with 16 g. NaOAc in 16 cc. H₂O and 25 cc. alc. in 9.3 g.

yield, m. 123° (aqueous alc.). The derivative (XIIa) from PhCOEt,

prepared by

the same method, was a sticky solid which could not be crystallized XI

(9.3 g.)

heated 6 hrs. with 80 cc. concentrated HCl gave 5.9 g. 4',5'-dimethyl-2-

phenylpyrrolo-[2',3'-3,4]quinoline (XII).HCl, m. about 300°

(variable). XII.HCl made alkaline with NH₃ gave free XII, needles, m.304-5° (C₆H₆). XII was recovered unchanged after 4.5 hrs. heatingwith either AcCl or Ac₂O. Crude XIIa (2.8 g.) heated 6 hrs. with 30 cc.

concentrated HCl gave

4'-methyl-2,5'-diphenylpyrrolo-[2',3'-3,4]quinoline-HCl,

m. about 300° (variable). VI (10 g.) refluxed 0.5 hr. with 30 cc.

L11 ANSWER 151 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

heated 3 hrs. with 10 g. NH₄OAc at 180-200° and then digested withdil. NaOH gave 0.45 g. IV, m. 276° (MeNO₂). A stream of dry NH₃passed 0.5 hr. into a soln. of 0.5 g. XVIII in 5 g. AcNH₂ at 175°

gave 0.3 g. of a product which contained 50 mg. IV; 4-acetate, m.

287-9° (AcOH). IV (1.2 g.) refluxed 2 hrs. with MeI in 10 cc. MeOH

gave 0.9 g. V, m. 285° (decomp.). III (1 g.) in 10 cc. 3N NaOH

treated 5 min. at 55° with 1 cc. Me₂SO₄ gave 0.7 g.

N'-methyl-4-oxo-10-phenyl-1,2,9-triazaphenanthrene, m. 280-1°

(BuOH). XVII (0.6 g.) refluxed 2 hrs. with MeOH-NaOMe gave

4-methoxy-10-phenyl-1,2,9-triazaphenanthrene, needles, m. 194-8°

(alc.).

IT 111295-79-5, 3H-Pyrrolo[2,3-c]quinoline, 1,2-dimethyl-4-phenyl-,

hydrochloride 111295-80-8, 3H-Pyrrolo[2,3-c]quinoline,

1,2-dimethyl-4-phenyl- 115124-29-3, 3H-Pyrrolo[2,3-c]quinoline,

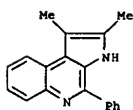
1-methyl-2,4-diphenyl-, hydrochloride

(preparation of)

RN 111295-79-5 CAPLUS

CN 3H-Pyrrolo[2,3-c]quinoline, 1,2-dimethyl-4-phenyl-, hydrochloride (6CI)

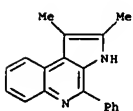
(CA INDEX NAME)



● HCl

RN 111295-80-8 CAPLUS

CN 3H-Pyrrolo[2,3-c]quinoline, 1,2-dimethyl-4-phenyl- (6CI) (CA INDEX NAME)



RN 115124-29-3 CAPLUS

CN 3H-Pyrrolo[2,3-c]quinoline, 1-methyl-2,4-diphenyl-, hydrochloride (6CI)

(CA INDEX NAME)

L11 ANSWER 151 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

SOC12 and then heated 0.5 hr. with 50 cc. alc. gave Et

2-phenyl-3-phthalimidoquinoline-4-carboxylate, leaflets, m. 192-3°

(alc.). VI (50 g.) refluxed 0.5 hr. with 75 cc. SOC12 and the acid

chloride suspended in dry C₆H₆ stirred 18 hrs. with a suspension of Namalonic acid ester (from 24 cc. CH₂(CO₂Et)₂, 4.2 g., and 200 cc. C₆H₆),

the mixt. refluxed 5 hrs., stirred 18 hrs. at room temp., heated to about

60° and stirred 0.25 hr. with 60 cc. concd. HCl in 100 cc. H₂O, andthe aq. layer extd. with C₆H₆ gave a condensation product. This

substance

(15 g.) refluxed 10 min. with 210 cc. 35% H₂SO₄ gave 10 g.

4-acetyl-2-phenyl-3-phthalimidoquinoline (XIII), m. 240-1° (alc.);

oxime, m. 240° (decomp.). XIII (3 g.) heated 4 hrs. with 20 cc.

AcOH and 3 cc. 100% NH₄.H₂O gave the hydrazone, orange powder, m.

196° (decomp.). XIII (0.5 g.) refluxed 3.5 hrs. with 8 cc. 48%

HBr and the filtrate basified gave VII. VIII (2 g.) refluxed 0.5 hr.

with

5 cc. SOC12 and the residue left a few hrs. at room temp. with 20 cc. 15%

HCl and the filtrate made alk. gave 3-amino-4-chloro-2-phenylquinoline

(XIV), needles, m. 126° (ligroine); acetyl deriv, m. 195°

(C₆H₆). An identical expt. in which the HCl treatment was omitted,

yielded by digestion with ligroine a small amt. of a solid which

spontaneously decompd. with evolution of SO₂. The compd., m. 126°,was unchanged after refluxing 2 hrs. with 18% H₂SO₄, but 1 hr. with 55%H₂SO₄ gave 3-amino-4-hydroxy-2-phenylquinoline, m. 251° (decomp.).XIV (0.5 g.) in 7 g. PhOH treated 1.5 hr. at 195° with dry NH₃, themixt. treated with 100 cc. H₂O and NaOH soln., and isolated gave 0.3 g.

3-amino-4-phenoxy-2-phenylquinoline (XV), m. 175°. Treatment of

XIV with PhOH and KOH at 100° failed to provide XV. Attempts to

convert XV into the 4-amino deriv. by heating with NH₄OAc at 140°

failed. 3-Amino-4-cyano-2-phenylquinoline (24 g.) added during 0.5 hr.

to

MeMgI (from 20 cc. MeI) in 150 cc. Et₂O and 450 cc. C₆H₆, the mixt.

refluxed 20 hrs., stirred with 1400 g. ice and 360 cc. concd. HCl, the

org. layer extd. with 5N HCl, the acid portion basified, extd. with C₆H₆gave 22.4 g. ketimine (XVI), m. 133-4° (C₆H₆-ligroine). XVI (15g.) refluxed 1 hr. with H₂O and concd. HCl gave I, needles, m.

93-4° (hexane). 3-Amino-2-phenylquinoline-4-carboxamide (35 g.)

refluxed 3.5 hrs. with MeMgI (from 54 cc. MeI) gave 29 g. XVI which was

then hydrolyzed to 25 g. almost pure I. I (12 g.) in 30 cc. concd. HCl

and 120 cc. H₂O cooled to -5° and treated during 5 min. with 3.1 g.NaNO₂ in 65 cc. H₂O, then set aside 2 hrs. at room temp. gave III,

plates,

m. 262° (alc.). I (1 g.) treated 5 min. in 25 cc. concd. HCl at

0° with 0.3 g. NaNO₂ in H₂O, after a few min. 75 cc. concd. HCl

added, and the mixt. heated 4 hrs. at 60° and isolated gave 90 mg.

III and II, m. 100-1°. III (11 g.), 17 g. PCl₅, and 85 cc. POCl₃refluxed 2.5 hrs., the POCl₃ removed, the residue shaken 20 min. with 100cc. C₆H₆, 150 g. ice, and 100 cc. 3N NaOH gave 9.4 g. 4-chloro-10-phenyl-1,2,9-triazaphenanthrene (XVII), blades, m. 186° (EtOAc). Dry NH₃

was passed through 0.4 g. XVII in 2 g. PhOH at 180°, the mixt.

heated 15 min. with 4 g. NaOH in 30 cc. H₂O, and the product isolated

gave

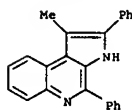
0.4 g. 4-phenoxy-10-phenyl-1,2,9-triazaphenanthrene (XVIII), pink

needles,

m. 221°. XVII (6 g.) heated 1.5 hrs. with 2 g. KOH in 30 g. PhOH

and digested with 350 cc. warm 1.5N NaOH gave 8 g. XVIII. XVIII (1 g.)

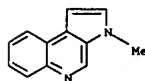
L11 ANSWER 151 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



● HCl

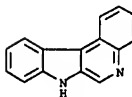
L11 ANSWER 152 OF 162 CAPLUS COPYRIGHT 2005 ACS ON STN
 AN 1954:3628 CAPLUS
 DN 48:3628
 OREF 48:695b-1
 TI Constitution of calycanthine. VI. β -(4-Quinolyl)ethylamine and derivatives
 AU Eiter, K.; Mrazek, E.
 CS Univ. Vienna
 SO Monatshefte fuer Chemie (1952), 83, 915-25
 CODEN: MOCHB7; ISSN: 0026-9247
 DT Journal
 LA Unavailable
 AB cf. C.A. 45, 627f. β -(4-Quinolyl)- β -hydroxynitroethane (2.02 g.) in 4 cc. EtOH added with cooling to 8.1 g. SnCl₂·2H₂O in 15 cc. concentrated
 HCl, the mixture heated 1 h., diluted with H₂O, made strongly basic and extracted with ether, the extract dried and concentrated, and the residue distilled (bath temperature 160-80°/0.1 mm.), gave 1.35 g. oily β -(4-quinolyl)- β -hydroxyethylamine (I). I (110 mg.) heated 2 h. with 2 cc. HCO₂Et at 100°, the solution concentrated, gave 102 mg. N-formyl derivative, m. 161° (from alc., ether, or THF (II)). I (200 mg.) heated 3 h. with 3 g. POCl₃, poured onto ice and kept overnight, made basic with Na₂CO₃, extracted with CHCl₃, gave 62 mg. unstable chloroamine, which, treated with 50 mg. 5% Pd-C and H in 5 cc. alc. and distilled (bath temperature 100-10°/0.1 mm.), gave 17 mg. β -(4-quinolyl)ethylamine (III); picrate, m. 220° (decomposition) (with transition point 192-4°) (from MeOH or Me₂CO). Et 4-quinolylacetate (IV) (2.17 g., m. 64°) in 100 cc. absolute ether added dropwise to 420 mg. LiAlH₄ in 150 cc. absolute ether, the mixture refluxed 15 min. more, diluted with a little H₂O, filtered, the cake washed with ether, the organic solution dried and concentrated, and the residue distilled (bath temperature 150-70°/0.1 mm.), gave 94% β -(4-quinolyl)ethanol (V); picrate, m. 156-7°. V (2.5 g.) and 5 cc. solution saturated at 0° with HBr in a sealed tube heated 15 h. on a waterbath, the excess HBr removed in vacuo, the residue in MeOH with 8 cc. MeOH saturated with NH₃ with 50 mg. CuSO₄ in a sealed tube heated 15 h. on a water bath, the mixture diluted with H₂O, extracted with ether, the extract dried and concentrated, and the residue distilled, gave 611 mg. III. III (611 mg.) heated 2 h. in a sealed tube with 4 cc. HCO₂Et at 100° gave 425 mg. N-formyl derivative (VI) (for distillation, bath temperature 170-90°/0.1 mm.). IV (425 mg.) in a small thimble was placed in the vapor zone of 20 cc. II containing 180 mg. LiAlH₄, and the mixture refluxed 12 h., the solution treated with a little H₂O, made basic with NaOH, extracted with ether, the extract distilled (bath temperature

L11 ANSWER 152 OF 162 CAPLUS COPYRIGHT 2005 ACS ON STN (Continued)
 110°/0.1 mm.), gave 270 mg. N-Me deriv. (VII); picrate (VIII), m. 183°. Similarly 1.78 g. V with HBr, then 8 cc. 33% MeNH₂ and 50 mg. CuSO₄, gave 655 mg. VII. IV (1.5 g.) kept 2 days at room temp. with 10 cc. 33% MeNH₂, the mixt. concd. in vacuo and the residue taken up in alc., gave 1.1 g. N-Me amide, m. 144° (a small amt. distd. with some decompn., bath, 140-60°/0.1 mm.). To 1.3 g. 4-quinolylacetoneitrile in 50 cc. abs. EtOH was added in small pieces 3 g. Na, and the mixt. dild. with H₂O, made just acid with HCl, concd. in vacuo, the residue made basic, extd. with ether, and the ext. distd. (bath temp. 140-60°/0.1 mm.), gave 970 mg. β -(1,2,3,4-tetrahydro-4-quinolyl)-ethylamine (IX). IX (950 mg.) with 8 cc. HCO₂Et gave 870 mg. N-formyl deriv. (X). X (850 mg.) with 390 mg. pure LiAlH₄ in 20 cc. II gave 645 mg. oily product from which a picrate could not be prepd. X (300 mg.) with 125 mg. practical LiAlH₄ in 15 cc. II gave on distn. 99 mg. Cl₂H₁₆N₂ (XI) (bath temp. 90-100°/0.1 mm.), m. 148°, and 150 mg. β -(1,2,3,4-tetrahydro-4-quinolyl)-N-methylethylamine (XII) (air bath temp. 110°). XII (520 mg.) refluxed 6 h. with 100 cc. 1% HOAc and 3 g. AgOAc, cooled, filtered, made basic with NH₃, and extd. with ether, the ext. distd. (bath temp. 110°/0.1 mm.), gave 52 mg. oil (picrate, m. 183°) which gave no depression of m.p. with VIII. β -(1,2,3,4-tetrahydro-2-quinolyl)ethylamine (1.6 g.) with 8 cc. HCO₂Et gave 1.2 g. N-formyl deriv. (XIII) (for distn., bath temp., 160-80°/0.1 mm.). XIII (400 mg.) with 170 mg. practical LiAlH₄ in 20 cc. II gave 250 mg. single product, β -(1,2,3,4-tetrahydro-2-quinolyl)-N-methylethylamine (for distn., bath temp. 110-20°/0.1 mm.). The UV spectra of XI and 3-methyl-4-pyrroquinoline (3-methyl-3H-pyrrolo[2,3-c]quinoline) are given. XI is probably formed by cyclization of the side chain of X into the 5-position of the quinoline ring.
 IT 6878-06-4, 3H-Pyrrolo[2,3-c]quinoline, 3-methyl- (spectrum of)
 RN 6878-06-4 CAPLUS
 CN Echitamyrene (8CI) (CA INDEX NAME)

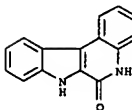


L11 ANSWER 153 OF 162 CAPLUS COPYRIGHT 2005 ACS ON STN
 AN 1951:52920 CAPLUS
 DN 45:52920
 OREF 45:9060c-1,9061a
 TI Influence of structure on the ultraviolet absorption spectra of heterocyclic systems
 AU Clemo, G. R.; Felton, D. G. I.
 CS Univ. Durham, Newcastle-on-Tyne, UK
 SO Journal of the Chemical Society, Abstracts (1951) 671-7
 CODEN: JCSAAZ; ISSN: 0590-9791
 DT Journal
 LA Unavailable
 OS CASREACT 45:52920
 AB 5-Quinolylhydrazine-2HCl (I) (5 g.), 2.13 g. cyclohexanone (II), 5.91 g. AcONa, 37 ml. H₂O, and 20 ml. EtOH, heated 1 hr. on the steam bath and the oily hydrazone cyclized by heating 10 min. at 100° with 2 ml. concentrated H₂SO₄ in 30 cc. AcOH, gave 4',5',6',7'-tetrahydroindolo(2',3':5,6)quinoline (III), m. 293-4° (Dewar, C.A. 39, 1643.7); picrate, yellow, m. 255° (decomposition), seps. with 0.75 mol. II and contains 0.25 mol. II after drying at 180° in vacuo. III (100 mg.) and 50 mg. Pd-C, heated at 290-300°/10 mm. and the product again heated with Pd-C, gave 80 mg. indolo(2',3':5,6)quinoline (IV), very pale yellow, m. 334-5° (decomposition), absorption maximum at 2450 and 2920 Å. (log ϵ 4.48 and 4.58); picrate, yellow, with 0.5 mol. EtOH, m. 277° (decompn.). The oily hydrazone from I and 4-methylcyclohexanone, cyclized with H₂SO₄ in AcOH, gives the 5'-Me derivative of III, m. 298.5° (decomposition); picrate, yellow, m. 259-60° (decomposition), seps. with 0.5 mol. II, lost at 180° in vacuo; 5'-Me derivative of IV, very pale yellow, m. 335°, absorption maximum at 2460 and 2970 Å. (log ϵ 4.53 and 4.57); picrate, yellow, with 0.75 mol. II, decompose 280-7°. 4',5',6',7'-Tetrahydroindolo(3',2':5,6)quinolone (V), m. 205°; picrate, orange-yellow needles with 0.25 mol. II, m. 241-2° (decomposition); dehydrogenation over Pd-C gives indolo(3',2':5,6)quinoline (VI), very pale yellow, m. 211°, absorption maximum at 2455, 2800, and 3410 Å. (log ϵ 4.48, 4.50, and 3.99); picrate, bright yellow, with 1 mol. H₂O, m. 275° (decomposition). 5'-Me derivative of V, pale yellow, m. 258°; picrate, m. 254° (decomposition); 5'-Me derivative of VI, pale yellow, m. 307° (decomposition), absorption maximum at 2480, 2830, and 3450 Å. (log ϵ 4.40, 4.41, and 3.97); picrate, with 0.25 mol. II (lost at 180° in vacuo), m. 207° (decomposition). 4',5',6',7'-Tetrahydroindolo(3',2':7,8)quinoline (VII), m. 151-2°; picrate, deep yellow, with 0.5 mol. II (lost at 180°), m. 250° (decomposition); indolo(3',2':7,8)quinoline (VIII), m. 169°, absorption maximum at 2430 and 2920 Å. (log ϵ 4.58 and 4.67); picrate, with 0.75 mol. II (lost at 180°), m. 265° (decomposition); 5'-Me derivative of VII, pale yellow, m. 152°; picrate, deep yellow, m. about 250°; 5'-Me derivative of VIII, m. 193-4°, absorption maximum at 2450 and 2940 Å. (log ϵ 4.53 and 4.60); picrate, bright yellow, with 0.5 mol. II (0.25 mol. after drying at 180° in vacuo). 3-Aminoquinoline, through reduction of the diazo compound with SnCl₂ in HCl, gives 3-quinolylhydrazine, fawn, m. 176-7°. The 3-quinolylhydrazone of II (pale yellow, m. 150-1°), cyclized with H₂SO₄ in AcOH, gives 4',5',6',7'-tetrahydroindolo(2',3':3,4)quinoline, very pale cream, m. 265-6°; dehydrogenation gives indolo(2',3':3,4)quinoline (IX), m. 249°, absorption maximum at 2590 and 3275 Å. (log ϵ 4.61 and 4.20); the 2-Me derivative m. 200-1°, absorption maximum at 2580 and 3250 Å. (log

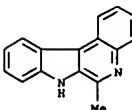
L11 ANSWER 153 OF 162 CAPLUS COPYRIGHT 2005 ACS ON STN (Continued)
 ϵ 4.58 and 4.11). o-O₂NC₆H₄CH₂C(=N₂NHPh)CO₂Et in EtOH, satd. with HCl and refluxed 30 min., gives 91% of the Et ester (X), orange-yellow, m. 131°, of 3-(o-nitrophenyl)-2-indolecarboxylic acid (XII), yellow, m. 274°. Reduction of X in AcOEt over Pt oxide (room temp. and 6 atm.) gives a quant. yield of 2-hydroxyindolo(2',3':3,4)quinoline, m. 313°. Reduction of XI over Pt oxide is slow and yields 3-(o-aminophenyl)-2-indolecarboxylic acid, m. 312-13° (decompn.); PC15 in POCl₃ gives the chloride, m. 185°, reduction of which in AcOH over Pd-C gives IX. The relation of the absorption spectra of these compds. to those of related compds. is discussed.
 IT 205-32-3, 7H-Indolo[2,3-c]quinoline 13220-53-6, 7H-Indolo[2,3-c]quinolin-6-ol 125131-95-5, 7H-Indolo[2,3-c]quinoline, 6-methyl- 855612-24-7, 7H-Indolo[2,3-c]quinoline, 8,9,10,11-tetrahydro- (preparation of)
 RN 205-32-3 CAPLUS
 CN 7H-Indolo[2,3-c]quinoline (8CI, 9CI) (CA INDEX NAME)



RN 13220-53-6 CAPLUS
 CN 6H-Indolo[2,3-c]quinolin-6-one, 5,7-dihydro- (8CI, 9CI) (CA INDEX NAME)

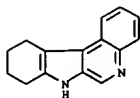


RN 125131-95-5 CAPLUS
 CN 7H-Indolo[2,3-c]quinoline, 6-methyl- (9CI) (CA INDEX NAME)



RN 855612-24-7 CAPLUS
 CN 7H-Indolo[2,3-c]quinoline, 8,9,10,11-tetrahydro- (5CI) (CA INDEX NAME)

L11 ANSWER 153 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



L11 ANSWER 154 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 1951:3613 CAPLUS
 DN 45:3613
 OREF 45:6275-1,628a-f
 TI The constitution of calycanthine. IV. The synthesis of the base Cl2H10N2
 AU Eiter, K.; Nagy, Maria
 CS Univ., Vienna
 SO Monatshefte fuer Chemie (1949), 80, 607-21
 CODEN: MOCHB7; ISSN: 0026-9247
 DT Journal
 LA Unavailable
 GI For diagram(s), see printed CA Issue.
 AB cf. C.A. 42, 6823d; 44, 8920g. The structure of the base Cl2H10N2 (I),
 m.

115-16°, obtained by the reaction of calycanthine with AgOAc (C.A. 42, 6823g) has been elucidated by the preparation of 3 isomeric compds. Hydroxyquinaldine (II) (0.1027 g.), 1 cc. MeOH, and ethereal CH2N2 gave 0.0951 g. 3-methoxyquinaldine, b0.1 80-100° (air-bath temperature), m. 34.5-5.0°. II (0.5 g.) and 3 cc. 33% aqueous MeNH2 (III), heated 10 h. in an PhNH2 bath, gave 0.162 g. 3-(methylamino)quinaldine (IV), b0.4 140°, m. 61° (from petr. ether), also obtained by heating 3 h. at 180° a mixture of II, 1.5 cc. III saturated at 0° with SO2, and 2 cc. III. IV (0.5013 g.) and 2.8 g. freshly distilled (from P2O5) HCO2H, refluxed 3.5 h., diluted with H2O, made alkaline with Na2CO3, and extracted with Et2O gave 0.4999 g. 3-(N-methylformamido)quinaldine (V), b0.4 130-50°, m. 70° (from Et2O-petr. ether). V (0.1 g.) and 1 g. freshly fused ZnCl2 heated 15 min. in a metal bath at 250°, diluted with H2O, made alkaline with concentrated NaOH, and extracted with Et2O gave 0.0269 g. 3-N-methyl-2-pyrroquinoline (VI), subliming at a bath temperature of 130-80° at 0.4 mm. as white, strongly refractive prisms, m. 147-8°, different from I. VI fluoresces blue in alc. solution. Attempted recrystn. from Et2O-petr. ether or MeOH resulted in decomposition; picrate, orange-yellow, m. 245-6° (from MeOH). o-H2NC6H4COMe (2 g.), 2.85 g. ClCH2CHO.H2O, 100 cc. H2O, and 100 cc. 9% NaOH shaken periodically for 3 days, extracted with Et2O, and the aqueous solution saturated with CO2 and extracted with Et2O gave 0.02 g. 3-hydroxyepidrine, m. 199° after repeated sublimation at 130° and 0.4 mm. 3-Nitrolepiline (VII) (1 g.) was reduced with 7.5 g. SnCl2 to 0.8083 g. 3-aminolepiline-0.5H2O (VIII), sinters 45-50°, m. 91°; picrate, m. 203-4° (decomposition) (from MeOH); acetamido derivative, m. 206° after sublimation. FeSO4 and NH4OH also reduced VII to VIII. VIII (0.39 g.) in 7 cc. 2 N H2SO4 was diazotized and the solution added dropwise to 250 cc. boiling H2O, the whole made alkaline, filtered, and the filtrate saturated with CO2 and extracted with Et2O to give 3-N-4-(pyrazolo-4',5')quinoline (IX), m. 223.5° after recrystn. from Me2CO and repeated sublimation. IX gave no color with FeCl3 and formed an acetate, m. 167-8° after repeated sublimation. VIII (0.4 g.), 0.01 g. Naturkueper "C" (X), 0.01 g. freshly ignited K2CO3, and 2 cc. MeI were heated 4 h. in a boiling PhBr bath and the quaternary compound dry-distilled to

L11 ANSWER 154 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)
 give 0.2723 g. 3-(methylamino)lepiline (XI), b0.5 120°, pale yellow crystals, and 0.0059 g. 3-(dimethylamino)lepiline, oil, b0.5 80°; picrate, needles, m. 209-10° (decompn.) (from MeOH). Purified through the HCl salt, XI m. 131.5° (from Et2O-petr. ether); N-Ac deriv., sublimes at 110-20° (0.5 mm.), m. 111° (from Et2O-petr. ether). XI (0.16 g.) and 1 cc. anhyd. HCO2H were refluxed 3 h., the whole poured into H2O, and the mixt. made alk. and extd. with

Et2O to give 3-formamidolepiline-H2O (XII) (after 0.5 h. heating it was possible to isolate the formyl deriv. of XI), b0.4 140-50°, m. 61°, solidifies and m. 145° (from C6H6); picrate, yellow plates, m. 210-14°. XII was also obtained from 3-amino-lepiline and anhyd. HCO2H. XII (0.0873 g.) (dried over P2O5) and 10 parts P2O5 were heated 35 min. in vacuo at 250-60°, cooled, decompd. with H2O, heated with dil. HCl on the water bath, made alk. with NH4OH, filtered, the filtrate extd. with Et2O, and the Et2O distd. to give 3-N-4-pyrroquinoline (XIII), sublimes 110-70° (0.05 mm.), m. 233° (from MeOH, ether, and petr. ether), sol. in alc. with blue fluorescence. XIII (0.0502 g.), 0.5 cc. MeI, and 0.5 mg. X were heated

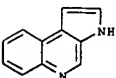
10 h. at 155°, and the quaternary compd. decompd. at 230° and 0.05 mm. to give 3-Ngr;-methyl-4-pyrroquinoline (XIV), b0.05 120-40°, m. 115-16°. The mixed m.p. and the UV absorption curves of XIV and I showed them to be identical. Incidental to this work,

I oxidized with HNO3 (d. 1.4) gave a product (XV) insol. in alkalis (cf. Ger. 630,769, C.A. 31, 219.5), decomp. 234° and on cooling solidified as long needles (XVI), m. 229-30° after sublimation. XV and XVI appear to have the mol. formula C10H9O4N3 or C10H7O4N3. 1-Methyl-2-carboline, m. 53°, nitrated with HNO3 (d. 1.4) at 100° gives x-bz-nitro-1-methyl-2-carboline, m. 195-6° (from dil. alc. or Me2CO).

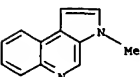
IT 232-86-0, 3H-Pyrrolo[2,3-c]quinoline 6878-06-4, 3H-Pyrrolo[2,3-c]quinoline, 3-methyl- (preparation of)

RN 232-86-0 CAPLUS

CN 3H-Pyrrolo[2,3-c]quinoline (7CI, 8CI, 9CI) (CA INDEX NAME)



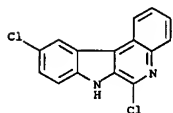
RN 6878-06-4 CAPLUS
 CN Echitamyne (8CI) (CA INDEX NAME)



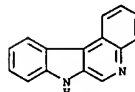
L11 ANSWER 154 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

L11 ANSWER 155 OF 162 CAPLUS COPYRIGHT 2005 ACS ON STN
 AN 1940:24249 CAPLUS
 DN 34:24249
 OREF 34:3742c-1,3743a-c
 TI Attempts to find new antimalarials. XVI. Synthesis of some derivatives of 4-carboline and 5,6-benzo-4-carboline
 AU Kermack, Wm. O.; Tebrich, Walter
 SO Journal of the Chemical Society, Abstracts (1940) 314-18
 CODEN: JCSAAZ; ISSN: 0590-9791
 DT Journal
 LA Unavailable
 AB cf. C. A. 31, 408.4. The object of the present work was to prepare derivs. of 4-carboline carrying a basic side chain similar to that present in atabrin and plasmoquin. To this end 3-chloro-1-methyl-4-carboline (I) was heated with Et2NCH2CH2NH2 (II) under various conditions but condensation proceeded with great difficulty; in 1 experiment was obtained a small quantity (insufficient for purification) of what appeared to be 3- β -diethylaminoethylamino-1-methyl-4-carboline-2-HBr, with 2 mols. H2O. In order to raise the activity of the Cl atom, 0.2 g. of I and Me2SO4 in C6H6 were heated 1 hr. on the water bath, giving 0.2 g. of the methosulfate (IIA), yellow, m. 180°; it is very hygroscopic; dilute EtOH solns. containing a trace of NH3 exhibit a distinct blue-violet fluorescence; IIA has a markedly bitter taste. IIA (0.25 g.) and 0.1 g. II in 1.2 g. PhOH, heated 1 hr. on the water bath, give the base, from which was prepared 0.1 g. of β -3-diethylaminoethylamino-1,4-dimethylcarbolinium disalicylate, with 2 mols. H2O, very hygroscopic, m. 189°; very dilute acid solns. exhibit a strong blue fluorescence with a greenish tinge; analysis agrees with the formulation (C19H27N4)+(C7H5O3)-.C7H6O3.2H2O, 1 mol. of the acid being united to the side chain in ordinary salt formation and the other being combined with the quaternary carbolinium C atom. The analogous 3- γ -diethylaminopropyl derivative, with 1 mol. H2O, m. 152°. 3-Keto-3,4-dihydro-5,6-benzo-4-carboline (III), heated with POCl3 and PCl5 in a sealed tube at 100-10° for 6 hrs., gives 3-chloro-5,6-benzo-4-carboline (IV), m. 182°; very dilute EtOH solns. under the C arc show blue-violet fluorescence. Heating 0.5 g. IV and 0.4 cc. II at 150° for 6 hrs. gives 0.7 g. of 3- β -diethylaminoethylamino-5,6-benzo-4-carboline (V), as the di-HBr salt, m. 270°; very dilute aqueous solns. show a blue-violet fluorescence, which is destroyed by acids; the salt has a markedly bitter taste. The 1-Me derivative of III (0.4 g.), heated with POCl3 at 100-10° for 24 hrs., gives 0.4 g. of the 1-Me derivative of IV, m. 145°; II gives the 1-Me derivative of V, whose di-HCl salt, with 1 mol. H2O, m. 261°; dilute EtOH solns. exhibit a blue-violet and dilute aqueous solns. a blue-green fluorescence; small traces have a markedly bitter taste and produce considerable anesthesia of the tongue. 3-Keto-5,6-benzo-4-carboline (1 g.) with POCl3 and PCl5, heated for 24 hrs. at 120°, gives 0.5 g. of 3,10-dichloro-5,6-benzo-4-carboline (VI), m. 250°; dilute EtOH solns. under the C arc show a distinct blue-violet fluorescence. p-ClC6H4NHNH2 and o-O2NC6H4COCO2H in EtOH, refluxed for 30 min., cooled, saturated with HCl, again boiled 30 min., and the resulting oil boiled with 10% EtOH-KOH, give the red-brown K salt of 6-chloro-3-o-nitrophenylindole-2-carboxylic acid, yellow, m. 303°

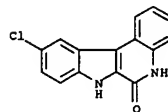
L11 ANSWER 155 OF 162 CAPLUS COPYRIGHT 2005 ACS ON STN (Continued)
 RN 63190-21-6 CAPLUS
 CN 7H-Indolo[2,3-c]quinoline, 6,10-dichloro- (9CI) (CA INDEX NAME)



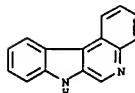
L11 ANSWER 155 OF 162 CAPLUS COPYRIGHT 2005 ACS ON STN (Continued)
 (decompn.); reduction with Zn in boiling 80% AcOH (refluxing 30 min.) gives 10-chloro-3-keto-3,4-dihydro-5,6-benzo-4-carboline, m. 337°; heating 0.5 g. with POCl3 and PCl5 for 24 hrs. at 125° gives 0.4 g. of VI. p-MeOC6H4NHNH2 and AcCO2H in 15% AcOH, warmed for 5-10 min. at 50-60° and the hydrazone warmed with concd. HCl for 5 min. at 50°, give 5-methoxy-1-methylindole-2-carboxylic acid (VII), very pale brown, m. 216°; p-Me2NC6H4CHO gives a purple color after heating on the water bath, which is intensified by the addn. of NaNO2. With PCl5 in AcCl 1 g. of VII yields the acid chloride which reacts with aminoacetal in CHCl3 to give 1.4 g. of 5-methoxy-1-methylindole-2-carboxy- β , β -diethoxyethylamide (VIII), m. 104°; p-Me2NC6H4CHO gives a purple color, changed to a dark red by NaNO2. Warming 3.4 g. of VIII in EtOH-HCl at 50° for 15 min. gives 2 g. of 3-keto-10-methoxy-1-methyl-3,4-dihydro-4-carboline (IX), long needles from EtOH or short rectangular prisms from aq. EtOH, m. 263°; EtOH solns. contg. a trace of mineral acid show a marked blue-violet fluorescence. Heating 0.5 g. of IX with 5 cc. POCl3 and 0.5 g. PCl5 at 105-10° for 6 hrs. gives 3-chloro-10-methoxy-1-methyl-4-carboline as the HCl salt, yellow, m. 185°; the free base could not be crystd. IX (1 g.), 10 cc. POCl3 and 2 g. PCl5, heated 6 hrs. at 110°, give a trichloro-10-methoxy-1-methyl-4-carboline, pale yellow, m. 214°; both compds. show a blue fluorescence in EtOH.
 IT 205-32-3, 7-Indolo[2,3-c]quinoline (derivs.)
 RN 205-32-3 CAPLUS
 CN 7H-Indolo[2,3-c]quinoline (8CI, 9CI) (CA INDEX NAME)



IT 52865-78-8, 7-Indolo[2,3-c]quinolin-6(5)-one, 10-chloro-63190-21-6, 7-Indolo[2,3-c]quinoline, 6,10-dichloro- (preparation of)
 RN 52865-78-8 CAPLUS
 CN 6H-Indolo[2,3-c]quinolin-6-one, 10-chloro-5,7-dihydro- (9CI) (CA INDEX NAME)



L11 ANSWER 156 OF 162 CAPLUS COPYRIGHT 2005 ACS ON STN
 AN 1940:24248 CAPLUS
 DN 34:24248
 OREF 34:37411,3742a-c
 TI N1,N4-nicotinyl derivatives of sulfanilamide
 AU Daniels, T. C.; Imamoto, Harry
 SO Journal of the American Chemical Society (1940), 62, 741-2
 CODEN: JACSAT; ISSN: 0002-7863
 DT Journal
 LA Unavailable
 AB Nicotinyl chloride and sulfanilamide in anhydrous C5H5N, refluxed 1 h., give 50-75% of N4-nicotinylsulfanilamide (I), m. 257-8°. Nicotinilide (0.05 mol.), added to 0.5 mol. Cl3SO3H below 15°, the temperature gradually increased to 60°, maintained at this temperature for 2 h., the mixture cooled and treated with an excess of cold 28% NH4OH, gives 40-50% of I. I does not titrate to a phenolphthalein (II) end point. The N1-isomer (III) of I, prepared according to Crossley, Northey and Hultquist (C. A. 34, 392.8) also m. 257-8° but because of its greater acidity titrates quant. to a II end point. A 50% mixture of I and III m. 233-5°; titration shows that III does not rearrange during the melting. I and Ac2O give 50% of the N1-Ac derivative, m. 255-6°. I and nicotinyl chloride in C5H5N, refluxed 1 h., give 40% of N1,N4-dinicotinylsulfanilamide, m. 222°, resolidifies and then m. 248°; titration with NaOH of the higher-melting form gives the same equivalent weight as before melting. The preliminary pharmacol. investigation indicates that I is effective in the treatment of exptl. hemolytic streptococcus infections and also certain types of pneumococcus infections. The toxicity of I is lower than that of either sulfanilamide or sulfapyridine.
 IT 205-32-3, 7-Indolo[2,3-c]quinoline (derivs.)
 RN 205-32-3 CAPLUS
 CN 7H-Indolo[2,3-c]quinoline (8CI, 9CI) (CA INDEX NAME)



L11 ANSWER 157 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN

AN 1938:30152 CAPLUS

DN 32:30152

OREF 32:4166d-h

TI Quinoline derivatives. III

AU Ghosh, Tejendra M.

SO J. Indian Chem. Soc. (1937), 14, 713-16

DT Journal

LA Unavailable

AB cf. C. A. 31, 7431.8. In that the therapeutic value of ichthyol oils has been attributed to the presence of alkylthiophenes and the replacement of the Ph group in the cinchophen mol. by the thiophene radical results in a product with marked antiphlogistic and analgesic properties it has seemed of interest to synthesize a compound in which the thiophene ring is fused with the quinoline residue. A mixture of 10.4 g. of Et 3,4-dihydroxythiophene-2,5-dicarboxylate and 7.5 g. PhNH₂ was heated on an

oil

bath for 30 min. and at 170-5° for 2.5 hrs. The product was triturated and washed with alc. and crystallized from dilute pyridine, yielding

8.5 g. of 2,5-diphenylcarbamido-3,4-dihydroxythiophene (I), C₁₈H₁₄N₂O₄S, m. 292-3° (decomposition). I (6 g.) was heated with 30 cc. concentrated

H2SO₄

for 3 hrs. at 100° and the cooled reaction mixture was poured onto ice, treated with excess Na₂CO₃, filtered and acidified. The greenish white amorphous solid was recrystd. from hot H₂O and gave 1.5 g. of 4-hydroxythiophene-2,3-(3',4')-2'-hydroxyquinolinesulfonic acid, C₁₁H₇N₂O₅S₂, m. above 310°, forming HBr and HCl salts, both m. above 300°. Attempts were made to condense Et 1-N-phenyl-3,4-dihydroxypyrrrolidine-2,5-dicarboxylate with PhNH₂ but no reaction was observed. Following the work of Narang and Ray (C. A. 25, 3342) on the synthesis of glyoxalinoquinolines as antimalarials, 13.2 g. of 2-methylbenzimidazole was condensed with 7.3 g. (CO₂Et)₂ in the presence of 2.3 g. Na in 100 cc. absolute alc. The mass was diluted with H₂O and

extracted

with Et₂O. Acidification of the aqueous solution with excess dilute HCl and

recrystn. of the washed precipitate from hot H₂O gave 3 g. of 1,4-dibenzimidazolylbiacetyl (II), C₁₈H₁₄N₄O₂, m. above 300°. Synthesis of bis(benzimidazolylquinoline) deriva. by condensation of II with o-CH₃COHCHO in the presence of Ac₂O and fused NaOAc and in pyridine in the presence of piperidine was not achieved even on continued refluxing.

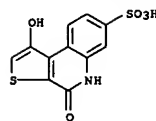
IT 856353-06-5, Thieno[2,3-c]quinoline-7-sulfonic acid, 1,4-dihydroxy- (and salts)

RN 856353-06-5 CAPLUS

CN Thieno[2,3-c]quinoline-7-sulfonic acid, 1,4-dihydroxy- (4CI) (CA INDEX NAME)

L11 ANSWER 157 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN

(Continued)



L11 ANSWER 158 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN

AN 1929:47061 CAPLUS

DN 23:47061

OREF 23:5384e-c

TI The action of salts of polynuclear bases on colloidal suspensions and on the electrocapillary curve

AU Butler, J. A. V.; Kermack, W. O.

SO Proc. Roy. Soc. Edinburgh (1929), 49, 300-12

DT Journal

LA Unavailable

AB Salts of 5,6-benzo-4-carboline and its derivs. precipitate colloidal gum benzoin

in concns. of 0.0000012 to 0.00002 M. Approx. the same concns. of these salts also precipitate sols of gum mastic, Au, As₂S₃ and Cds, all

negatively charged colloids. With higher concns. of the benzocarboline salts, no precipitation occurs but the charge on the particles changes from neg.

to pos., as shown by cataphoretic expts. with gum benzoin. Other substances

producing a similar effect include certain dyestuffs, inorg. cations having a valence of 3 or more (C. A. 19, 2435), and proteins on the acid side of the isoelec. point (C. A. 18, 414). Mixts. of benzocarboline salts and gelatin require less of each in the mixture than of either one alone to

precipitate gum benzoin at pH 4.6. At pH 7.0 a higher concentration of benzocarboline causes

precipitation but the presence of gelatin tends to prevent precipitation

The effect of 0.00005 M solns. of the benzocarboline salts on the electrocapillary

curve of Hg (C. A. 23, 2340) is to lower the maximum and to shift it to the

right of the maximum of the primitive (neg. polarization of the Hg). The

greatest fall in surface tension occurs to the left of the maximum of the

primitive (pos. polarization of the Hg). The results with sols indicate high

adsorption of benzocarboline ions on a negatively charged surface. The

electrocapillary curves indicate high adsorption even on a positively

charged surface.

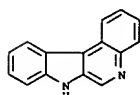
IT 205-32-3, 7-Indolo[2,3-c]quinoline

(salts of, and its derivs., effect on colloids and on their

electrocapillarity)

RN 205-32-3 CAPLUS

CN 7H-Indolo[2,3-c]quinoline (8CI, 9CI) (CA INDEX NAME)



L11 ANSWER 159 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN

AN 1928:20194 CAPLUS

DN 22:20194

OREF 22:2355e-1,2356a-c

TI Syntheses in the indole series. III. Theory of anhydronium base formation and the constitution of methosulfates, with some observations on the

fluorescence of 5,6-benz-4-carboline and its derivatives

AU Kermack, Wm. O.; Slater, R. H.

SO Journal of the Chemical Society, Abstracts (1928) 789-97

CODEN: JCSAAZ; ISSN: 0590-9791

DT Journal

LA Unavailable

GI For diagram(s), see printed CA Issue.

AB cf. C. A. 22, 1355. In support of the view that the anhydronium base

formed from harmine methosulfate by the action of alkali has the

constitution I (R', OMe; R'', R''', Me) and is a derivative of

4-w-carboline (I, R', R'', R''', Me), it has been shown that the

propochloride of methylharmine is not identical with the methochloride of

propylharmine (C. A. 16, 4206), but this evidence is not quite

conclusive.

The anhydronium base from 5,6-benz-4-carboline methosulfate should be a

derivative of 4-w-carboline and should possess the constitution II(R',

H;

R'', Me) and so the methosulfate of this base ought to be identical with

1-methyl-5,6-benz-4-carboline methosulfate. This is so and proves

definitely that Me₂SO₄ adds itself to the pyrrole N atom of the

anhydronium base. 5,6-Benz-4-carboline, C₆H₆ and Me₂SO₄, heated at

100°, for 30 min., give the methosulfate, bright yellow, m.

235°, which exhibits a greenish fluorescence; solns. in H₂O, MeOH

and EtOH exhibit the same fluorescence; the concentrated H₂SO₄ solution

also

exhibits a green fluorescence, which changes to a deep greenish blue on

warming. NH₄OH in the cold gives 4-methyl-5,6-benz-4-w-carboline,

orange, m. 205°; the EtOH and C₆H₆ solns. exhibit a brilliant green

fluorescence. Both this and 1-methyl-5,6-benz-4-carboline give

1,4-dimethyl-5,6-benz-4-carboline methyl sulfate, chrome-yellow, m.

300°; solns. in H₂O, boiling MeOH and concentrated H₂SO₄ exhibit a

greenish yellow fluorescence, the last becoming greenish blue on warming.

1-Methyl-5,6-benz-4-carboline, prepared from

3-o-aminophenyl-1-methylindole,

forms pale pink needles, m. 142°; its solns. exhibit a brilliant

green fluorescence. The HCl salt gives none of the usual indole

reactions. 3-Methyl-5,6-benz-4-carboline methosulfate, bright yellow, m.

270°; solns. exhibit a vivid greenish blue fluorescence; the H₂SO₄

solution becomes brilliant blue on warming and bluish green on dilution

NH₄OH gives 3,4-dimethyl-5,6-benz-4-w-carboline, yellow, m. 225°;

solns. exhibit a brilliant greenish blue fluorescence. This, as well as

the 1,3-Me₂ derivative, gives 1,3,4-trimethyl-5,6-benz-4-carboline

methyl

sulfate, chrome-yellow, m. 292°, exhibiting a bright green

fluorescence. 3-Ethyl-5,6-benz-4-carboline methosulfate, pale yellow, m.

250°; solns. exhibit a greenish blue fluorescence. A table is

given showing the fluorescence of a number of derivs. of

5,6-benz-4-carboline;

a Me (or Et) group attached to the C atom in position 3 invariably

renders the fluorescence more blue. With the introduction of a Me group

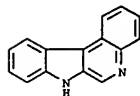
attached to either N atom, the fluorescence in acid solution becomes more

yellow, the effect being greater when the Me group is in position 1 than

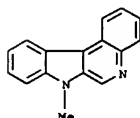
when it is in position 4. In acid solution the effect of a Me group in

position 3 is almost balanced by that of a Me group in position 4. In

L11 ANSWER 159 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)
 alk. soln. a Me group in position 1 renders the fluorescence more blue, whereas in position 4 it makes the fluorescence more green. In alk. soln.
 a Me group in the 4-position is much more powerful in making the fluorescence more green than 1 on position 3 is in making it blue. The compds. which contain a Me group in the 4-position fluoresce more yellow in alk. than in acid soln., whereas those compds. not possessing a Me group in this position are bluer in alk. than in acid soln. The fluorescence is usually considered stronger in acid than in alk. soln.
 IT 205-32-3, 7-Indolo[2,3-c]quinoline 7-methyl- 672926-01-1,
 7-Indolo[2,3-c]quinoline, 7-methyl- 859770-51-7,
 7-Indolo[2,3-c]quinoline, 6,7-dimethyl-, methosulfate (preparation of)
 RN 205-32-3 CAPLUS
 CN 7H-Indolo[2,3-c]quinoline (8CI, 9CI) (CA INDEX NAME)



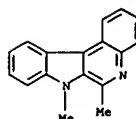
RN 672926-01-1 CAPLUS
 CN 7H-Indolo[2,3-c]quinoline, 7-methyl- (9CI) (CA INDEX NAME)



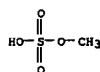
RN 859770-51-7 CAPLUS
 CN 7-Indolo[2,3-c]quinoline, 6,7-dimethyl-, methosulfate (3CI) (CA INDEX NAME)
 CM 1
 CRN 859770-50-6
 CMF C17 H14 N2

L11 ANSWER 160 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN
 RN 1928-11312 CAPLUS
 DN 22:11312
 OREF 22:1355a-e
 TI Synthesis in the indole series. II. 5,6-Benz-4-carboline and its derivatives
 AU Kermack, Wm. O.; Slater, R. H.
 SO Journal of the Chemical Society, Abstracts (1928) 32-45
 CODEN: JCSAAZ; ISSN: 0590-9791
 DT Journal
 LA Unavailable
 AB cf. C. A. 19, 506. Condensation of o-O2NC6H4CH2Cl and AcCH2CO2Et in EtONa
 gives the compound m. 103° (Reissert, Ber. 29, 637(1896)) and an isomer, C20H20O7N2, m. 183° but no indication of an indole derivative o-O2NC6H4CH2(:NNHPh)CO2H, m. 153.5°, in boiling EtOH, saturated with HCl, gives 3-o-nitrophenylindole-2-carboxylic acid (I), pale yellow, m. 276° (decomposition), giving an orange color with Ehrlich's reagent; Ca, Ba, Mg, Pb and Zn salts: brucine salt, bright yellow, m. 230°, (αD)16 -50.5° (1% CHCl3 solution); the mother liquor from I gives 3-o-nitrophenylindole (II), bright orange, m. 119°. Refluxing 6 g. I with 20 g. Zn and 150 cc. 80% AcOH for 30 min. gives 4.5 g. of 3-keto-3,4-dihydro-5,6-benz-4-carboline, does not m. 316°; this also results from I, NH4OH, FeSO4 and H2O after boiling 2 hrs. II also results by heating I at 275-80°, or better by heating the NH4 salt. Reduction of II with Fe and HCl in EtOH gives 3-o-aminophenylindole (III), m. about 75°; HCl salt, m. 288°; picrate, orange, m. 190°, decomp. 200°. From III, through the formyl derivative, there results 5,6-benz-4-carboline, pale yellow, m. 245°; this was also obtained from the above 3-keto derivative by distilling with Zn in H2.
 Through the Ac derivative of III, m. 158°, POCl3 gives 3-methyl-5,6-benz-4-carboline, pale yellow, m. 204-5° (HCl salt, bright yellow; picrate, bright yellow; chloroplatinate, yellow plates); the saturated HCl salt solution exhibits a vivid green fluorescence which becomes blue on dilution The 3-Et derivative, pale yellow, m. 158°; in acid solution it has an intense bluish green fluorescence. o-O2NC6H4CH2COCO2H, PhMeNNH2 and HCl in AcOH give 3-o-nitrophenyl-1-methylindole-2-carboxylic acid (IV), bright yellow, m. 234° (decomposition); various salts were prepared With Zn dust in AcOH IV gives 3-keto-1-methyl-3,4-dihydro-5,6-benz-4-carboline, m. 302°. 3-o-Nitrophenyl-1-methylindole, orange m. 98°, results by heating the 2-CO2H derivative at 250°; reduction with Fe in EtOH-HCl gives the 3-amino derivative, old gold, m. 129°; HCl salt, m. 246°; picrate, bright orange, m. 196°, decomp. 205°; Ac derivative, pale yellow, m. 159°; with POCl3 the latter gives 1,3-dimethyl-5,6-benz-4-carboline, pale yellow, m. 154°; acid solns. have a green fluorescence.
 IT 125131-95-8, 7-Indolo[2,3-c]quinoline, 6-methyl- (and salts)
 RN 125131-95-5 CAPLUS
 CN 7H-Indolo[2,3-c]quinoline, 6-methyl- (9CI) (CA INDEX NAME)

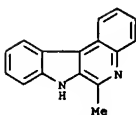
L11 ANSWER 159 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



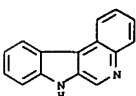
CM 2
 CRN 75-93-4
 CMF C H4 O4 S



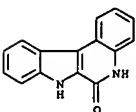
L11 ANSWER 160 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



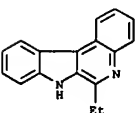
IT 205-32-3, 7-Indolo[2,3-c]quinoline 13220-53-6,
 7-Indolo[2,3-c]quinolin-6(5)-one 859192-09-9,
 7-Indolo[2,3-c]quinoline, 6-ethyl- 859770-50-6,
 7-Indolo[2,3-c]quinoline, 6,7-dimethyl- 859772-42-2,
 7-Indolo[2,3-c]quinolin-6(5)-one, 7-methyl- (preparation of)
 RN 205-32-3 CAPLUS
 CN 7H-Indolo[2,3-c]quinoline (8CI, 9CI) (CA INDEX NAME)



RN 13220-53-6 CAPLUS
 CN 6H-Indolo[2,3-c]quinolin-6-one, 5,7-dihydro- (8CI, 9CI) (CA INDEX NAME)

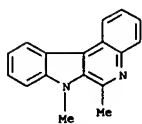


RN 859192-09-9 CAPLUS
 CN INDEX NAME NOT YET ASSIGNED

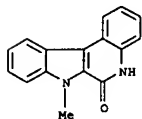


RN 859770-50-6 CAPLUS
 CN 7-Indolo[2,3-c]quinoline, 6,7-dimethyl- (3CI) (CA INDEX NAME)

L11 ANSWER 160 OF 162 CAPLUS COPYRIGHT 2005 ACS ON STN (Continued)



RN 859772-42-2 CAPLUS
CN 7-Indolo[2,3-c]quinolin-6(5)-one, 7-methyl- (3CI) (CA INDEX NAME)



L11 ANSWER 161 OF 162 CAPLUS COPYRIGHT 2005 ACS ON STN

AN 1924:16140 CAPLUS
DN 18:16140
OREF 18:2161b-1,2162a-b
TI Mechanism of E. Fischer's synthesis of indoles. Application of the method to the preparation of a pyrindole derivative
AU Robinson, Gertrude Maud; Robinson, Robert
SO Journal of the Chemical Society, Transactions (1924), 125, 827-40
CODEN: JCHTA3; ISSN: 0368-1645

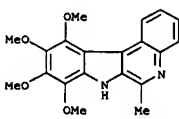
DT Journal
LA Unavailable
GI For diagram(s), see printed CA Issue.
AB cf. C. A. 12, 2313; Hollins, C. A. 16, 2862. The theoretical portion of the paper is largely occupied with a defense of the original mechanism as proposed by R. and R. and a criticism of the review by Hollins. Two expts. are reported to disprove H.'s criticisms. Tetrahydrocarbazole may be prepared in an 87% yield in the presence of a reducing agent (SnCl₂, AcOH and HCl). Indole derivs. may be obtained in the presence of amines not derivable by reduction of the resp. arylhydrazones (α-methylindole in the presence of p-H₂NOC₆H₄Me, nitrotetrahydrocarbazole in the presence of PhNH₂). A pyrindole derivative has been obtained by a reaction analogous to the Fischer indole synthesis. 3-Hydrazinoquinoline (I), pale straw-yellow, m. 169°, is obtained in 60% yield by reduction of quinoline-3-diazonium chloride by NaHSO₃ followed by NaHSO₂ and hydrolysis of the resulting sulfonate by HCl. Its pale yellow aqueous acid solns. are quite devoid of fluorescence. The solution in dilute H₂SO₄ is rapidly oxidized by CuSO₄ with evolution of N and formation of quinoline. I condenses with BzH to give benzaldehyde quinoline-3-hydrazine, pale yellow, m. 202°, the HCl salt of which is brilliant yellow and m. 261°. Other aromatic aldehydes also yield sparingly soluble HCl salts. I and cyclohexanone probably condense in the normal manner but the compound undergoes oxidation with facility, giving cyclohexanonequinoline-3-hydrazine dioxide, orange, m. 131° (decomposition) and when quickly heated decomps. with violence. Dried in the air, this analyzes for C₁₆H₁₉O₂N₃.0.66 H₂O, while if dried at 100°, it contains 0.33 H₂O. This does not yield an azo derivative in the usual way, but if melted with β-ClOH₇OH there results 3-quinolineazo-β-naphthol, cyclohexanone being set free, which is also the case when it is warmed with SnCl₂ and HCl, 3-aminoquinoline also being formed. On heating with dilute H₂SO₄ a yellow solution results which evolves N. The compound resembles very closely quinoline-3-diazo-4-oxide, which has been prepared by coupling 4-hydroxyquinoline with a slight excess of p-HO₃SC₆H₄N₂X and acidifying the alc. solution of the azo compound with AcOH (the acid dyes silk in yellowish orange shades of good fastness to light); the Na salt in dilute NaOH is then treated with Na₂S₂O₄, acidified with AcOH and HCl, SO₂ expelled by boiling and NaNO₂ added to the cooled solution until a strong starch-iodide reaction is obtained. When 3.5 g. I, 14 g. cyclohexanone

L11 ANSWER 161 OF 162 CAPLUS COPYRIGHT 2005 ACS ON STN (Continued)

and 5.5 g. glacial AcOH are heated for 10 hrs., there results 63% of 3-methylbenzo-(5,6)-9,10,11,12-tetrahydro-4-carboline (II), C₁₆H₁₆N₂.C₆H₆, m. 198°; the C₆H₆ is lost at 140-50° after 2 hrs. and the substance then m. 226°. Its dil. aq. solns. exhibit a pale violet fluorescence, intensified by HCl. Methosulfate, pale yellow, m. 225°. Its soln. show a bright bluish violet fluorescence. With an excess of hot concd. aq. KOH this gives 3,4-dimethylbenzo-(5,6)-9,10,11,12-tetrahydro-4-isocarboline (III), yellow; freshly prepd., it contains solvent of crystn. and m. 120°; the dried material sinters 105° and m. indefinitely. The yellow soln. exhibits green fluorescence. It readily forms a yellow prism, whose solns. exhibit a vivid sky-blue fluorescence. Concd. NaOH ppts. a methohydroxide. Cyclohexanone azine (Mailhe, C. A. 16, 1942) is obtained in 70% yield by heating 33 g. cyclohexanone, 18 g. N₂H₄.H₂SO₄, 50 g. AcONa, 250 cc. H₂O and 150 cc. EtOH for 4 hrs. on the H₂O bath. On heating at 130° with 5 times its wt. of ZnCl₂, there results the compd. C₁₂H₂₀N₂.HCl.ZnCl₂, m. 271-2°, which, decompd. by NH₃, regenerates the azine. The azine, boiled 4 hrs. with 1.5 times its wt. of abs.

HCO₂H, gives an oil, b₁₆ 195°, which is probably a mixt. of approx. 2 mol. proportions of the related formylpyrazoline and one of octahydrocarbazole. The compd. obtained by the condensation of cotarnine and 6-nitropiperonal (C. A. 8, 3417) is probably 6-nitropiperonal-6-nitropiperonylhydrocotarnine, C₂₈H₂₃O₁₃N₃, not the compd. C₂₇H₁₈O₁₂N₂, as reported.

IT 861326-90-1, 2,3-γ-Indoloquinoline, 8,9,10,11-tetrahydro-6-methyl- 861359-96-8, 2,3-γ-Indoloquinoline, 8,9,10,11-tetrahydro-6-methyl-, methosulfate (preparation of)
RN 861326-90-1 CAPLUS
CN 2,3-γ-Indoloquinoline, 8,9,10,11-tetrahydro-6-methyl- (2CI) (CA INDEX NAME)

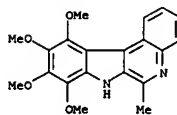


RN 861359-96-8 CAPLUS
CN 2,3-γ-Indoloquinoline, 8,9,10,11-tetrahydro-6-methyl-, methosulfate (2CI) (CA INDEX NAME)

CM 1

CRN 861326-90-1
CMF C₂₀ H₂₀ N₂ O₄

L11 ANSWER 161 OF 162 CAPLUS COPYRIGHT 2005 ACS ON STN (Continued)



CM 2

CRN 75-93-4
CMF C H₄ O₄ S

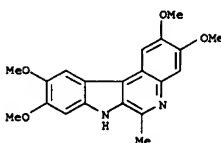


L11 ANSWER 162 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)
 AN 1924:12207 CAPLUS
 DN 18:12207
 GREF 18:1656a-1,1670a-1,1671a-h
 TI Harmine and harmaline. VII. Synthesis of apoharmine and of certain
 AU carbolines and copyrine derivatives
 AU Lawson, Wilfred; Perkin, Wm. H., Jr.; Robinson, Robt.
 SO Journal of the Chemical Society, Transactions (1924), 125,
 626-57
 CODEN: JCHTA3; ISSN: 0368-1645
 DT Journal
 LA Unavailable
 GI For diagram(s), see printed CA Issue.
 AB cf. C. A. 16, 4206. Harmine and carbazole are somewhat similarly
 constituted and this fact suggested that the applicability of known
 methods of synthesizing carbazole to the problem of the synthesis of
 carbolines should be tested; this method may be a general one for the
 synthesis of these compds. 2-Chloropyridine and o-C₆H₄(NH₂)₂ heated 6
 hrs. at 140° under 40 mm. pressure give chiefly o-aminophenyl-2-
 pyridylamine-HCl, which was not isolated but dissolved in EtOH and dilute
 HCl and treated with NaNO₂, giving 1-o-pyridylbenzotriazole (I), m.
 110-1° (picrate, yellow), which, cautiously heated in lots of 0.05
 g. with small amts. of fused ZnCl₂ gives 3-carboline (II), m. 210°;
 the dilute neutral solution in C₆H₆ exhibits violet fluorescence, while
 solns. of its salts do not. HCl salt, needles. HgCl₂ salt, woolly needles. H
 oxalate, slender needles. Picrate, canary-yellow, m. 260.4°.
 After reduction with Na in boiling AmOH, the product gives with alc.
 p-Me₂NC₆H₄CHO and HCl, a magenta color which is not discharged on cooling
 or addition of H₂O. 1-o-Quinolylbenzotriazole, m. 145°, dists.
 without decomposition at 12 mm., and when heated in small amts. at
 atmospheric pressure suddenly decomps. with violence, giving quinindoline (Gabriel
 and Eschenbach, Ber. 30, 3020), which exhibits a violet fluorescence in H₂SO₄
 and in EtOAc. Synthesis of the compound III would no doubt lead to the
 preparation of harmine; although the 3-aminoquinindoline (IV) was
 obtained, the final steps could not be carried out. 2-Methylquinoline-3,4-dicarboxylic
 acid (Pfitzinger, J. prakt. Chem. [2] 56, 316), when strongly heated,
 gives an anhydride, m. 218°, which, if treated with dry NH₃ at the
 imide, pale temperature of boiling PhNH₂, gives an unsatisfactory yield of the
 yellow, m. 257°, obtained in 95% yield by heating the acid and
 CO(NH₂)₂ at 230°. With Br in KOH at 80° the imide gives
 3-amino-2-methylquinoline-4-carboxylic acid, pale yellow, m.
 221-2°, which is smoothly converted (92% yield) by heating at
 225° to IV, m. 160-60.5°. In dilute acid solution this shows a
 bluish violet fluorescence and is readily diazotizable.
 Quinindine-β-naphthol is crimson, and crimson acid dyes moderately
 fast to light and washing were obtained with chromotropic acid, R-acid
 and E-acid. The base also couples with diazonium salts. Attempts to arylate
 the NH₂ group were fruitless, as also were attempts to condense it with
 o-ClC₆H₄NO₂, 1,4,2-Cl₂C₆HNO₂ and 2,4-(O₂N)₂C₆H₃Cl. It was also thought
 that IV could be prepared from 2-methylpyridine-3,4-dicarboxylic acid (V)

L11 ANSWER 162 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)
 (cf. Mumm and Hueneker, C. A. 12, 2201). PhCH:CHCOCH₂COCH₂Et and
 H₂NCHMe:CHCO₂Et, heated at 130° for 4 hrs. at 40 mm., gave Et
 styrylmethylpyridinedicarboxylate, pale yellow, m. 220-1°, isolated
 as the picrate, bright yellow, m. 147.5-8°. The H₂SO₄ salt is
 yellow and with picric acid gives the picrate. The acid gives no color
 with FeCl₃ and heated with resorcinol gives a yellow melt, sol. in aq.
 NaOH with a cherry-red color and intense green fluorescence. The
 phenylimide of the acid is yellow and exists in 2 forms, m. 228-30°
 and 203-4°, the 1st being converted into the 2nd by crystn. from
 C₆H₄Me₂. Oxidation of the acid with KMnO₄ gives 2-methylpyridine-3,4,6-
 tricarboxylic acid (VI), of which the K Ba and the mono-K salts were
 prepd. Ba salt, needles. Cu salt, pale blue needles. Fe''' salt,
 C₁₈H₁₂O₁₂N₂Fe₄H₂O, brownish red prisms. This acid is not identical with
 that obtained by Dobbie and Lauder (J. Chem. Soc. 81, 154) and thus the
 constitution of corydaline is still an open question. The anilide
 phenylimide of VI forms pale yellow needles, m. 237°, from the
 mother liquors of which the phenylimide of V, m. 190°, is
 deposited. V is readily obtained from VI by heating with 10 times its
 wt. of H₂O and a drop of H₂SO₄ at 200° for 9 hrs. The synthesis of
 apoharmine was then attempted by building up a substituted
 dibenzopapaverine and degrading by destruction of both C₆H₅ nuclei. The
 starting point was veratrone, which upon nitration, gave a di-NO₂ deriv.
 (6,6'-dinitro-3,4,3',4'-tetramethoxybenzophenone), m. 225° and sol.
 in concd. H₂SO₄ with an orange color. Shaking this with glacial AcOH,
 concd. HCl and an excess of granulated Zn for 36 hrs. gave the
 diamino-veratrone (VII), bright yellow, m. 210° (yield, 58%). The
 bisazo deriv. with β-ClOH₇OH has a deep bluish crimson color and
 gives an intense dark purple soln. in concd. H₂SO₄.
 Diacetylamino-veratrone, pale yellow, m. 203°, and with HNO₃, gives
 6-nitroacetoveratrylamide. With PhCOCH₂Br in AcOH, VII gives
 N-phenacyldiamino-veratrone, green-yellow, m. 185-6°, sepp. as the
 HBr salt (VIII). The diazo compd. gives with β-ClOH₇OH a red azo
 compd. If VIII in 30% aq. KOH and EtOH is heated 1 min. or if the free
 base is heated with glacial AcOH, there results phenyldiveratroharmine,
 m. about 150° and apparently combining with a variety of solvents.
 In neutral solvents, the solns. exhibit intense violet fluorescence but
 the yellow acid solns. in EtOH have only a weak green fluorescence. The
 salts are bright yellow. With BrCH₂Ac, VII gives at once
 methyldiveratroharmine (IX), m. 254° (about 18% yield); it
 crystals from EtOH with 2H₂O. It forms a yellow carbonate on exposure to
 the air. All the salts are a bright yellow. The methosulfate is
 orange-yellow, and a dil. EtOH soln. exhibits a vivid bluish green
 fluorescence. The HBr salt of IX, boiled with HI, gave
 methyltetrahydroxydibenzoharmine-HI, X.HI, yellow needles, sol. in dil.
 EtOH with a bright green fluorescence. The free base could not be
 purified. Oxidation with CrO₃ gave the acid XI, the soln. of which was
 rendered acid to Congo (H₂SO₄) and heated in a sealed tube at 200°
 for 10 hrs., giving XII; this acid was then dissolved in Na₂CO₃, added to
 soda-lime and heated in a combustion furnace in a stream of H₂, giving a
 very small yield of apoharmine (XIII). VII, CH₂(CO₂Me)₂ and AcOH, boiled
 30 min., give an excellent yield of dimethyldiveratroharmine (XIV), m.
 230-1°. Neutral solns. have a reddish violet fluorescence, while
 the salts have a bluish green fluorescence. Heated with C₆H₄(CO)₂O the
 mass becomes green, indigo-blue, crimson and deep violet-brown in
 succession. HNO₃ salt, C₂₂H₂₀N₂O₄.2HNO₃, intensely yellow needles.

L11 ANSWER 162 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)
 Picrate, C₃₂H₂₂N₂O₄.2HNO₃, yellow needles, decomp. 245°. With
 BrCH₂Ac phenylmethyldiveratroharmine, m. 270°, results; HgCl₂
 salt, yellow needles. Diphenyldiveratroharmine, pale yellow, m.
 362°. The HCl soln. exhibits green fluorescence and deposits the
 HCl salt. o-Phenylenediveratroharmine (XV), pale yellow, m. 304°,
 isolated as the acetate, yellow needles. In boiling BuOH the soln.
 exhibits bright bluish green fluorescence, in boiling C₆H₄Me₂ a bright
 blue. Aq. solns. of the salts are reddish orange to yellow and do not
 exhibit fluorescence. The salts exhibit a marked tendency to form
 colloidal solns. Hydroxymethyldiveratroharmine, pale yellow, m.
 320-30°; HCl salt, orange-yellow needles.
 Dihydroxydiveratroharmine, pale yellow, softens 285°, m.
 300° (decompn.). H₂SO₄ salt, yellow needles HCl salt,
 canary-yellow. Aminohydroxydiveratroharmine, salmon-colored, decomp.
 289-90°. Harmine is a 4-arylpyridine deriv. and therefore it is of
 interest that BrCH₂CO₂Et and H₂NCHMe:CHCO₂Et condense to Et
 6-hydroxy-4-phenyl-2-methylpyridine-3-carboxylate (Ruhemann, J. Chem.
 Soc. 75, 412). Acetoveratrone upon nitration yields the 6-NO₂ deriv.
 (XVI), pale yellow, m. 133-3.5° (not the 4,5-dinitroveratrole as
 stated by Harding, C. A. 9, 602, but is converted into this deriv. by
 boiling with HNO₃ until NO fumes are no longer evolved). With
 p-MeOC₆H₄CHO in KOH soln. it condenses to give
 6-nitro-3,4-dimethoxyphenyl
 4-methoxystyryl ketone, pale yellow, m. 170°. The crystals are
 colored deep red by H₂SO₄ and dissolve to a yellow soln., which becomes
 deep green on standing. The piperonylidene deriv., m. 176-7°,
 solidifies and then m. indefinitely above 200°.
 6-Aminoacetoveratrone, m. 133°. FeCl₃ gives a dirty green and then
 a deep brown color. After boiling with Zn and HCl the FeCl₃ reaction is
 deep indigo-blue, changing through green to brownish yellow.
 6-Nitroveratroylpyruvic acid (XVII), from XVI and (CO₂Et)₂ in EtONa, m.
 163°. FeCl₃ gives an intense brownish red color. Cotton in an alk.
 bath of the acid contg. Na₂SO₄ is dyed a bluish green.
 4-Hydroxy-6,7-dimethoxyquinoline-2-carboxylic acid (dimethoxykynurenic
 acid) sinters 260°, m. 270° (decompn.), results from XVII by
 warming the NH₄OH soln. with FeSO₄ on the H₂O bath. Heated with
 C₃H₅(OH)₃
 until CO₂ is no longer evolved, it forms
 4-hydroxy-6,7-dimethoxyquinoline,
 m. 224-5°, which gives a brownish red color with FeCl₃. It couples
 with diazonium salts to give red azo derivs. A soln. of
 5,7-dibromoisatinic acid (from 5,7-dibromoisatin, KOH, EtOH and H₂O) was
 treated with AcMe and heated at 90° for 15 min., giving
 6,8-dibromo-2-methylquinoline-4-carboxylic acid, m. 267°
 (decompn.), which, on heating, gives 6,8-dibromo-2-methylquinoline, m.
 100°; picrate, orange-yellow, m. 155°.
 IT 861359-95-7, 2,3-γ-Indoloquinoline, 2,3,9,10-tetramethoxy-6-
 methyl-
 (preparation of)
 RN 861359-95-7 CAPLUS
 CN 2,3-γ-Indoloquinoline, 2,3,9,10-tetramethoxy-6-methyl- (2CI) (CA
 INDEX NAME)

L11 ANSWER 162 OF 162 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



=> d his

(FILE 'HOME' ENTERED AT 10:51:11 ON 31 OCT 2005)

FILE 'REGISTRY' ENTERED AT 10:51:19 ON 31 OCT 2005

L1 STRUCTURE UPLOADED
L2 STRUCTURE UPLOADED
L3 STRUCTURE UPLOADED
L4 43 S L1 OR L2 OR L3
L5 1735 S L1 FULL

FILE 'CAPLUS' ENTERED AT 10:54:05 ON 31 OCT 2005

L6 333 S L5
L7 273 S L6 AND PY<2001

FILE 'REGISTRY' ENTERED AT 11:05:08 ON 31 OCT 2005

L8 13 S L2
L9 853 S L2 FULL

FILE 'CAPLUS' ENTERED AT 11:05:42 ON 31 OCT 2005

L10 198 S L9
L11 162 S L10 AND PY<2001

FILE 'REGISTRY' ENTERED AT 11:06:43 ON 31 OCT 2005

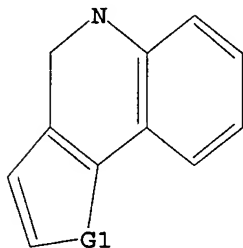
L12 50 S L3
L13 12732 S L12 FULL

FILE 'CAPLUS' ENTERED AT 11:07:30 ON 31 OCT 2005

L14 10561 S L13
L15 8562 S L14 AND PY<2001

=> d que l7 stat

L1 STR



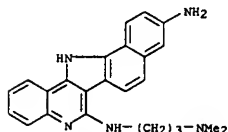
G1 O,S,N

Structure attributes must be viewed using STN Express query preparation.

L5 1735 SEA FILE=REGISTRY SSS FUL L1
L6 333 SEA FILE=CAPLUS ABB=ON PLU=ON L5
L7 273 SEA FILE=CAPLUS ABB=ON PLU=ON L6 AND PY<2001

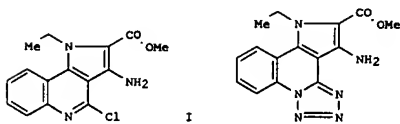
=> d l7 1-273 bib abs hitstr

L7 ANSWER 1 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 2001:15932 CAPLUS
 DN 135:195439
 TI Methods of attaching unprotected oligonucleotides to DNA-binding, fluorescent, or reactive ligands for synthesis of antisense or gene-directed agents and probes
 AU Boutorine, A. S.; Grimm, G. N.; Helene, C.
 CS Laboratory of Biophysics, National Museum of Natural History INSERM U201-CNRS UMR 8646, Paris, 75231, Fr.
 SO Molecular Biology (Translation of Molekulyarnaya Biologiya (Moscow)) (2000), 34(6), 804-813
 CODEN: MOLEBJ; ISSN: 0026-8933
 PB MAIK Nauka/Interperiodica Publishing
 DT Journal
 LA English
 AB The article describes the optimized methods for covalent attachment of unprotected oligonucleotides to functionally important ligands through their terminal phosphate or thiophosphate, including covalent attachment of one oligonucleotide to another. A comparative description of methods is presented for selective introduction of the phosphate, thiophosphate, amino, sulfhydryl, aldehyde, carboxylic, and other groups into the terminal nucleotide using chemical and enzymic reactions both in aqueous and organic media. Depending on their chemical nature, these groups can then interact with electrophilic or nucleophilic ligands carrying aliphatic or aromatic amino groups, hydrazido, sulfhydryl, disulfide, carboxylic, hydroxyl, aldehyde, bromo- or iodoalkyl, isothiocyanate, and other functions. The available methods allow one to vary the size of the linker between the oligonucleotide and ligand, its hydrophobicity and stability in acidic or alkaline media. The use of the disulfide bond permits cleavage of the oligonucleotide-ligand linkage in mild conditions.
 IT 287719-97-SD, oligonucleotide conjugates 350015-67-7D, oligonucleotide conjugates
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (methods of attaching unprotected oligonucleotides to DNA-binding, fluorescent, or reactive ligands for synthesis of antisense or gene-directed agents and probes)
 RN 287719-97-5 CAPLUS
 CN 13H-Benz[6,7]indolo[3,2-c]quinoline-6,10-diamine, N6-(3-(dimethylamino)propyl)- (9CI) (CA INDEX NAME)

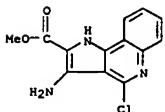


RN 350015-67-7 CAPLUS
 CN 13H-Benz[6,7]indolo[3,2-c]quinoline-6,10-diamine, N6-(3-aminopropyl)-

L7 ANSWER 2 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 2000:906473 CAPLUS
 DN 134:193383
 TI Fused quinoline heterocycles III: synthesis of first annulated 1,4,5,6,6a-pentaazabenz[a]indacenes, 1,3,5,6-tetraazaaceanthrylenes and 5,7,9,11-tetraazabenz[a]fluorenes
 AU Mekheimer, Ramadan Ahmed
 CS Department of Chemistry, Faculty of Science, El-Minia University, El-Minia, 61519, Egypt
 SO Synthesis (2000), (14), 2078-2084
 CODEN: SYNTHF; ISSN: 0039-7881
 PB Georg Thieme Verlag
 DT Journal
 LA English
 OS CASREACT 134:193383
 GI

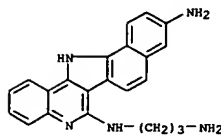


AB An easy and efficient synthesis of the versatile, hitherto unreported Me 3-amino-4-chloro-1-ethyl-pyrrolo[3,2-c]quinoline-2-carboxylate (I) was described. Reaction of I with sodium azide gave the corresponding tetracyclic ring system II in near quant. yield. Addnl. transformations to the title quinoline containing ring systems were also described.
 IT 327994-73-OP 327994-75-2P 327994-76-3P 327994-77-4P 327994-80-9P 327994-87-6P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
 (synthesis of 1,4,5,6,6a-pentaazabenz[a]indacenes, 1,3,5,6-tetraazaaceanthrylenes, and 5,7,9,11-tetraazabenz[a]fluorenes)
 RN 327994-73-0 CAPLUS
 CN 1H-Pyrrolo[3,2-c]quinoline-2-carboxylic acid, 3-amino-4-chloro-, methyl ester (9CI) (CA INDEX NAME)



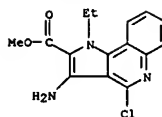
RN 327994-75-2 CAPLUS
 CN 1H-Pyrrolo[3,2-c]quinoline-2-carboxylic acid, 3-amino-4-chloro-1-ethyl-, methyl ester (9CI) (CA INDEX NAME)

L7 ANSWER 1 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)
 (9CI) (CA INDEX NAME)

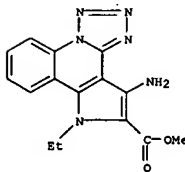


RE.CNT 28 THERE ARE 28 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

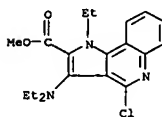
L7 ANSWER 2 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



RN 327994-76-3 CAPLUS
 CN 9H-Pyrrolo[3,2-c]tetrazolo[1,5-a]quinoline-10-carboxylic acid, 11-amino-9-ethyl-, methyl ester (9CI) (CA INDEX NAME)

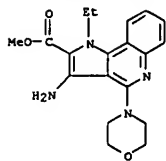


RN 327994-77-4 CAPLUS
 CN 1H-Pyrrolo[3,2-c]quinoline-2-carboxylic acid, 4-chloro-3-(diethylamino)-1-ethyl-, methyl ester (9CI) (CA INDEX NAME)

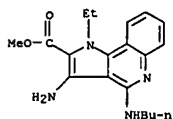


RN 327994-80-9 CAPLUS
 CN 1H-Pyrrolo[3,2-c]quinoline-2-carboxylic acid, 3-amino-1-ethyl-4-(4-morpholinyl)-, methyl ester (9CI) (CA INDEX NAME)

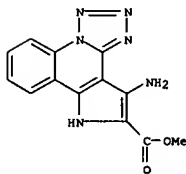
L7 ANSWER 2 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



RN 327994-87-6 CAPLUS
CN 1H-Pyrrolo[3,2-c]quinoline-2-carboxylic acid, 3-amino-4-(butylamino)-1-ethyl-, methyl ester (9CI) (CA INDEX NAME)

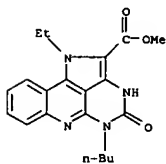


IT 327994-74-1P 327994-78-5P 327994-79-6P
327994-81-0P 327994-82-1P 327994-83-2P
327994-84-3P 327994-85-4P 327994-86-5P
RL: SPN (Synthetic preparation); PREP (Preparation)
(synthesis of 1,4,5,6,6a-pentaazabenz[a]indacenes,
1,3,5,6-tetraazaaceanthrylenes, and
5,7,9,11-tetraazabenz[a]fluorenes)
RN 327994-74-1 CAPLUS
CN 9H-Pyrrolo[3,2-c]tetrazolo[1,5-a]quinoline-10-carboxylic acid, 11-amino-,
methyl ester (9CI) (CA INDEX NAME)

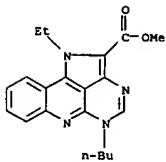


RN 327994-78-5 CAPLUS

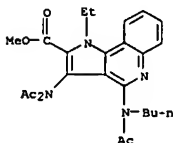
L7 ANSWER 2 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



RN 327994-83-2 CAPLUS
CN 1,3,5,6-Tetraazaaceanthrylene-2-carboxylic acid, 5-butyl-1-ethyl-1,5-dihydro-, methyl ester (9CI) (CA INDEX NAME)

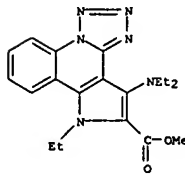


RN 327994-84-3 CAPLUS
CN 1H-Pyrrolo[3,2-c]quinoline-2-carboxylic acid, 4-(acetylbutylamino)-3-(diacetylamino)-1-ethyl-, methyl ester (9CI) (CA INDEX NAME)

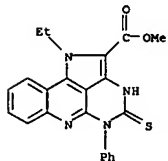


RN 327994-85-4 CAPLUS
CN 1,3,5,6-Tetraazaaceanthrylene-2-carboxylic acid, 1-ethyl-1,3,4,5-tetrahydro-5-(2-propenyl)-4-thioxo-, methyl ester (9CI) (CA INDEX NAME)

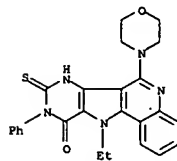
L7 ANSWER 2 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)
CN 9H-Pyrrolo[3,2-c]tetrazolo[1,5-a]quinoline-10-carboxylic acid, 11-(diethylamino)-9-ethyl-, methyl ester (9CI) (CA INDEX NAME)



RN 327994-79-6 CAPLUS
CN 1,3,5,6-Tetraazaaceanthrylene-2-carboxylic acid, 1-ethyl-1,3,4,5-tetrahydro-5-phenyl-4-thioxo-, methyl ester (9CI) (CA INDEX NAME)

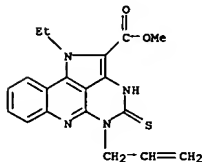


RN 327994-81-0 CAPLUS
CN 10H-Pyrimido[4',5':4,5]pyrrolo[3,2-c]quinolin-10-one, 11-ethyl-7,8,9,11-tetrahydro-6-(4-morpholinyl)-9-phenyl-8-thioxo- (9CI) (CA INDEX NAME).

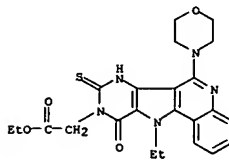


RN 327994-82-1 CAPLUS
CN 1,3,5,6-Tetraazaaceanthrylene-2-carboxylic acid, 5-butyl-1-ethyl-1,3,4,5-

L7 ANSWER 2 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



RN 327994-86-5 CAPLUS
CN 9H-Pyrimido[4',5':4,5]pyrrolo[3,2-c]quinoline-9-acetic acid, 11-ethyl-7,8,10,11-tetrahydro-6-(4-morpholinyl)-10-oxo-8-thioxo-, ethyl ester (9CI) (CA INDEX NAME)



RE.CNT 15 THERE ARE 15 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

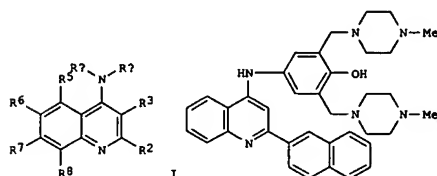
L7 ANSWER 3 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN
AN 2000:900623 CAPLUS
DN 134:56585
TI Antagonism of immunostimulatory CpG-oligonucleotides by 4-aminoquinolines
IN MacFarlane, Donald E.; Strekowski, Lucjan; Manzel, Lori; Ismail, Fyaz;
PA University of Iowa Research Foundation, USA
SO PCT Int. Appl., 138 pp.
CODEN: PIXXD2

DT Patent
LA English
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 2000076982	A1	20001221	WO 2000-US16723	20000616

--
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MY, NZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
CA 2412345 AA 20001221 CA 2000-2412345 20000616

--
US 6479504 B1 20021112 US 2000-595875 20000616
EP 1377554 A1 20040107 EP 2000-346819 20000616
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL
PRAI US 1999-139544P P 19990616
WO 2000-US16723 W 20000616
OS MARPAT 134:56585
GI



AB The present invention concerns compns. and methods for inhibiting stimulation of the immune system. The compds. and methods comprise

L7 ANSWER 4 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN
AN 2000:849478 CAPLUS
DN 134:120802
TI Physicochemical characterization of a new crystal form and improvements in
the pharmaceutical properties of the poorly water-soluble
antiosteoporosis
drug 3,9-bis(N,N-dimethylcarbamoyloxy)-5H-benzofuro[3,2-c]quinolin-6-one
(KCA-098) by solid dispersion with hydroxypropyl cellulose
AU Yamada, Tatsuhiko; Saito, Noriyasu; Anraku, Makoto; Imai, Teruko;
Otagiri,
Masaki
CS Pharmaceutical Laboratories, Kissei Pharmaceutical Co., Ltd., Nagano,
399-8304, Japan
SO Pharmaceutical Development and Technology (2000), 5(4), 443-454
CODEN: PDTEFS; ISSN: 1083-7450
PB Marcel Dekker, Inc.
DT Journal
LA English
AB The present study was undertaken to improve the oral absorption of
KCA-098, an antiosteoporosis drug. In this study, the form 2 of KCA-098
was used as a desirable crystal form for pharmaceutical formation among 3
kinds of crystal forms, 1, 2, and 3. Solid dispersions of KCA-098 with
hydroxypropyl cellulose (HPC) or poly(vinylpyrrolidone) (PVP) were
prepared by the solvent method. The physico-pharmaceutical properties of the
solid
dispersions were characterized by powder x-ray diffraction, FTIR
spectroscopy, and DSC. The powder x-ray diffractograms suggest that
KCA-098 in the HPC-SL solid dispersion existed in a partial crystalline
state
as a new crystal form that could be produced by recrystn. from the
solvent. Dissoln. from the solid dispersions was markedly enhanced in
comparison with that of the drug alone. The dissoln. enhancement was
observed to be greater for the solid dispersion with HPC-SL than for that
with PVP. The KCA-098/HPC-SL (1:2) solid dispersion capsules showed a
3.5-fold increase in the initial concentration and 2.5-fold increase in
initial
concentration of dissolved drug after 60 min, compared with the values
for a
phys. mixture of KCA-098 (form 2)/lactose (1:2). The in vivo absorption
of
the drug was investigated after oral administration of KCA-098 or its
solid dispersion. The area under the plasma concentration curve of
KCA-098 after
oral administration of the KCA-098/HPC-SL (1:2) solid dispersion capsule
was three-fold greater than that for the drug itself.

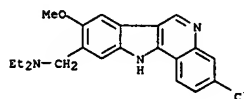
IT 129794-24-7, KCA-098
RL: BPR (Biological process); BSU (Biological study, unclassified); FRP
(Properties); THU (Therapeutic use); BIOL (Biological study); PROC
(Process); USES (Uses)
(physicochem. properties of crystal form of KCA-098 and solid
dispersions with HPC)

RN 129794-24-7 CAPLUS
CN Carbamic acid, dimethyl-, 5,6-dihydro-6-oxobenzofuro[3,2-c]quinoline-3,9-
diyl ester (9CI) (CA INDEX NAME)

L7 ANSWER 3 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)
compds. that are analogs and deriva. of chloroquine, such as
4-aminoquinolines, and other weak bases. More
particularly, a method of inhibiting immunostimulation in a subject
comprises administering an effective amt. of a compn. contg. substituted
4-quinolinamines [I: RA = H, lower alkyl; RB = (un)substituted alkyl,
alkenyl, or alkynyl secondary or tertiary amine; R2 = (un)substituted phenyl,
naphthyl, anthracyl, phenanthryl, or styryl; R3 = R5 = R8 = H; R6, R7 =
H,

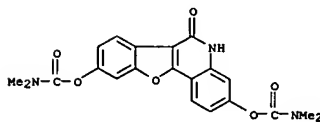
halo] and pharmaceutically acceptable salts thereof to said subject, the
4-quinolinamine compn. comprising a compd. having the structural formula
A. They can be used in preventative and therapeutic treatments of
autoimmune diseases and phenomena, transplant rejection such as
host-vs.-graft disease and sepsis. A detailed structure-activity
relationship (SAR) anal. of quinoline antagonists of immunostimulatory
CpG-ODNs was undertaken. The synthesis work together with SAR anal. of
the synthesized quinolines culminated in the finding of an extremely
active agent (II).

IT 34374-22-6
RL: BAC (Biological activity or effector, except adverse); BSU
(Biological
study, unclassified); BIOL (Biological study)
(preparation of aminoquinolines as antagonists for immunostimulatory
CpG-oligonucleotides for presentation and therapeutic treatment of
autoimmune diseases and transplant rejection such as host-vs.-graft
disease and sepsis)
RN 34374-22-6 CAPLUS
CN 11H-Indolo[3,2-c]quinoline-9-methanamine, 3-chloro-N,N-diethyl-8-methoxy-
(9CI) (CA INDEX NAME)



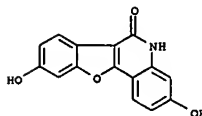
RE.CNT 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 4 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

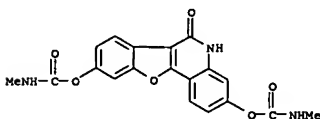


IT 92741-84-9 129794-23-6 129794-32-7
320737-80-2
RL: BSU (Biological study, unclassified); MFM (Metabolic formation); BIOL
(Biological study); FORM (Formation, nonpreparative)
(physicochem. properties of crystal form of KCA-098 and solid
dispersions with HPC)

RN 92741-84-9 CAPLUS
CN Benzofuro[3,2-c]quinolin-6(5H)-one, 3,9-dihydroxy- (9CI) (CA INDEX NAME)

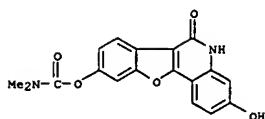


RN 129794-23-6 CAPLUS
CN Benzofuro[3,2-c]quinolin-6(5H)-one, 3,9-bis([(methylamino)carbonyloxy]-
(9CI) (CA INDEX NAME)

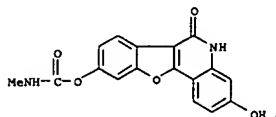


RN 129794-32-7 CAPLUS
CN Carbamic acid, dimethyl-, 5,6-dihydro-3-hydroxy-6-oxobenzofuro[3,2-
c]quinolin-9-yl ester (9CI) (CA INDEX NAME)

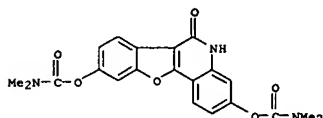
L7 ANSWER 4 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



RN 320737-80-2 CAPLUS
 CN Benzofuro[3,2-c]quinolin-6(5H)-one, 3-hydroxy-9-
 [((methylamino)carbonyloxy)- (9CI) (CA INDEX NAME)



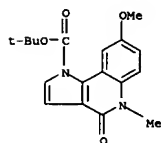
IT 174153-85-6
 RL: PRP (Properties); RCT (Reactant); RACT (Reactant or reagent)
 (physicochem. properties of crystal form of KCA-098 and solid
 dispersions with HPC)
 RN 174153-85-6 CAPLUS
 CN Carbanic acid, dimethyl-, 5,6-dihydro-6-oxobenzofuro[3,2-c]quinoline-3,9-
 diyl ester, monohydrate (9CI) (CA INDEX NAME)

● H₂O

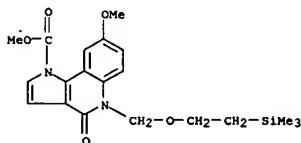
RE.CNT 31 THERE ARE 31 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 5 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

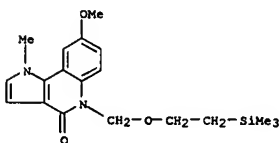
RN 324520-89-0 CAPLUS
 CN 1H-Pyrrolo[3,2-c]quinoline-1-carboxylic acid, 4,5-dihydro-8-methoxy-5-
 methyl-4-oxo-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)



RN 324520-92-5 CAPLUS
 CN 1H-Pyrrolo[3,2-c]quinoline-1-carboxylic acid,
 4,5-dihydro-8-methoxy-4-oxo-
 5-[[2-(trimethylsilyl)ethoxy]methyl]-, methyl ester (9CI) (CA INDEX
 NAME)



RN 324520-94-7 CAPLUS
 CN 4H-Pyrrolo[3,2-c]quinolin-4-one, 1,5-dihydro-8-methoxy-1-methyl-5-[[2-
 (trimethylsilyl)ethoxy]methyl]- (9CI) (CA INDEX NAME)

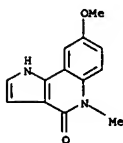


RE.CNT 31 THERE ARE 31 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

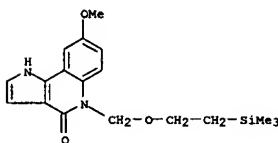
L7 ANSWER 5 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN

AN 2000:836229 CAPLUS
 DN 134:147513
 TI Aryl radical cyclization onto pyrroles: a divergent synthesis of
 spiropyrrolidinyloxindoles and pyrroloquinolines
 AU Escobedo, C.; Jones, K.
 CS School of Chemical and Pharmaceutical Sciences, Kingston University,
 Surrey, Kingston-upon-Thames, KT1 2EE, UK
 SO Tetrahedron Letters (2000), 41(46), 8951-8955
 CODEN: TELEAY; ISSN: 0040-4039
 PB Elsevier Science Ltd.
 DT Journal
 LA English
 OS CASREACT 134:147513
 AB The regiochem. of cyclization of an aryl radical on to a pyrrole is shown
 to depend on the N-substituent of the pyrrole. Changing this substituent
 allows the selective synthesis of either the spiropyrrolidinyloxindole or
 the pyrrolo[3,2-c]quinoline skeleton.
 IT 324520-83-4P 324520-84-5P 324520-89-0P
 324520-92-5P 324520-94-7P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation of spiropyrrolidinyloxindoles and pyrroloquinolines by
 aryl radical cyclization onto pyrroles)

RN 324520-83-4 CAPLUS
 CN 4H-Pyrrolo[3,2-c]quinolin-4-one, 1,5-dihydro-8-methoxy-5-methyl- (9CI)
 (CA INDEX NAME)

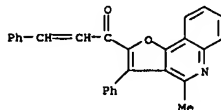


RN 324520-84-5 CAPLUS
 CN 4H-Pyrrolo[3,2-c]quinolin-4-one, 1,5-dihydro-8-methoxy-5-[[2-
 (trimethylsilyl)ethoxy]methyl]- (9CI) (CA INDEX NAME)

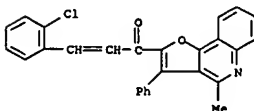


L7 ANSWER 6 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN

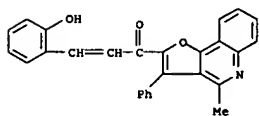
AN 2000:806044 CAPLUS
 DN 134:100785
 TI Facile synthesis of 2-cinnamoyl-4-methyl/4,6 dimethyl-3-phenylfuro[3,2-
 c]quinolines as marked antimicrobial agents
 AU Reddy, Y. Thirupathi; Rao, M. Kanakalingeswara; Rajitha, B.
 CS Department of Chemistry, Regional Engineering College, Warangal, India
 SO Heterocyclic Communications (2000), 6(4), 351-356
 CODEN: HCOMEX; ISSN: 0793-0283
 PB Freund Publishing House Ltd.
 DT Journal
 LA English
 OS CASREACT 134:100785
 AB A series of cinnamoylfuroquinolines is described. These compds. were
 evaluated for their anti microbial activity. The starting materials,
 2-methyl-3-benzoyl-4-hydroxy-2,8-dimethyl-3-benzoyl-4-hydroxyquinolines,
 are prepared in >80-90% yields under microwave irradiation (300 W)
 within 3 min
 in a domestic oven.
 IT 320410-88-8P 320410-99-9P 320411-00-5P
 320411-01-6P 320411-02-7P 320411-03-8P
 320411-04-9P 320411-05-0P 320411-06-1P
 320411-07-2P 320411-08-3P 320411-09-4P
 320411-10-7P 320411-11-8P 320411-12-9P
 320411-13-0P 320411-14-1P 320411-15-2P
 RL: BAC (Biological activity or effector, except adverse); BSU
 (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological
 study); PREP (Preparation)
 (preparation of cinnamoylfuroquinolines as antimicrobial agents)
 RN 320410-98-8 CAPLUS
 CN 2-Propen-1-one, 1-(4-methyl-3-phenylfuro[3,2-c]quinolin-2-yl)-3-phenyl-
 (9CI) (CA INDEX NAME)



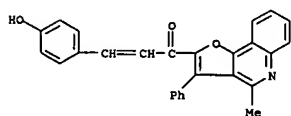
RN 320410-99-9 CAPLUS
 CN 2-Propen-1-one,
 3-(2-chlorophenyl)-1-(4-methyl-3-phenylfuro[3,2-c]quinolin-2-yl)- (9CI) (CA INDEX NAME)



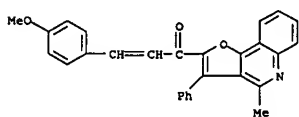
L7 ANSWER 6 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)
 RN 320411-00-5 CAPLUS
 CN 2-Propen-1-one, 3-(2-hydroxyphenyl)-1-(4-methyl-3-phenylfuro[3,2-c]quinolin-2-yl)- (9CI) (CA INDEX NAME)



RN 320411-01-6 CAPLUS
 CN 2-Propen-1-one, 3-(4-hydroxyphenyl)-1-(4-methyl-3-phenylfuro[3,2-c]quinolin-2-yl)- (9CI) (CA INDEX NAME)

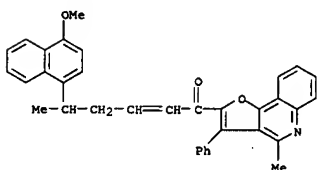


RN 320411-02-7 CAPLUS
 CN 2-Propen-1-one, 3-(4-methoxyphenyl)-1-(4-methyl-3-phenylfuro[3,2-c]quinolin-2-yl)- (9CI) (CA INDEX NAME)

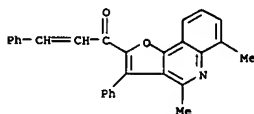


RN 320411-03-8 CAPLUS
 CN 2-Propen-1-one, 3-(4-methylphenyl)-1-(4-methyl-3-phenylfuro[3,2-c]quinolin-2-yl)- (9CI) (CA INDEX NAME)

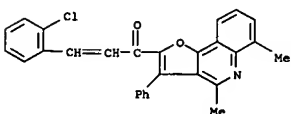
L7 ANSWER 6 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



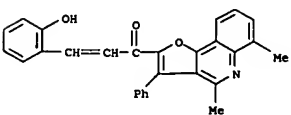
RN 320411-07-2 CAPLUS
 CN 2-Propen-1-one, 1-(4,6-dimethyl-3-phenylfuro[3,2-c]quinolin-2-yl)-3-phenyl- (9CI) (CA INDEX NAME)



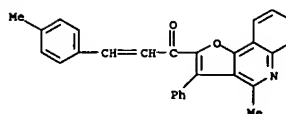
RN 320411-08-3 CAPLUS
 CN 2-Propen-1-one, 3-(2-chlorophenyl)-1-(4,6-dimethyl-3-phenylfuro[3,2-c]quinolin-2-yl)- (9CI) (CA INDEX NAME)



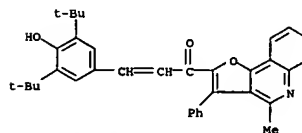
RN 320411-09-4 CAPLUS
 CN 2-Propen-1-one, 1-(4,6-dimethyl-3-phenylfuro[3,2-c]quinolin-2-yl)-3-(2-hydroxyphenyl)- (9CI) (CA INDEX NAME)



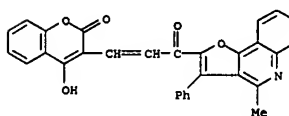
L7 ANSWER 6 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



RN 320411-04-9 CAPLUS
 CN 2-Propen-1-one, 3-[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]-1-(4-methyl-3-phenylfuro[3,2-c]quinolin-2-yl)- (9CI) (CA INDEX NAME)



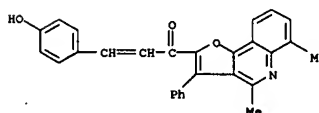
RN 320411-05-0 CAPLUS
 CN 2H-1-Benzopyran-2-one, 4-hydroxy-3-[3-(4-methyl-3-phenylfuro[3,2-c]quinolin-2-yl)-3-oxo-1-propenyl]- (9CI) (CA INDEX NAME)



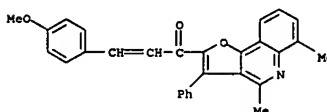
RN 320411-06-1 CAPLUS
 CN 2H-1-Benzopyran-2-one, 5-(4-methoxy-1-naphthalenyl)-1-(4-methyl-3-phenylfuro[3,2-c]quinolin-2-yl)- (9CI) (CA INDEX NAME)

L7 ANSWER 6 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

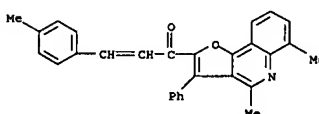
RN 320411-10-7 CAPLUS
 CN 2-Propen-1-one, 1-(4,6-dimethyl-3-phenylfuro[3,2-c]quinolin-2-yl)-3-(4-hydroxyphenyl)- (9CI) (CA INDEX NAME)



RN 320411-11-8 CAPLUS
 CN 2-Propen-1-one, 1-(4,6-dimethyl-3-phenylfuro[3,2-c]quinolin-2-yl)-3-(4-methoxyphenyl)- (9CI) (CA INDEX NAME)

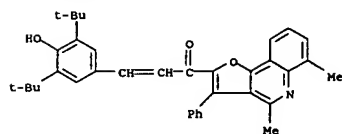


RN 320411-12-9 CAPLUS
 CN 2-Propen-1-one, 1-(4,6-dimethyl-3-phenylfuro[3,2-c]quinolin-2-yl)-3-(4-methylphenyl)- (9CI) (CA INDEX NAME)

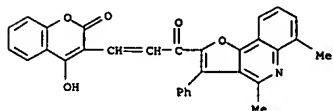


RN 320411-13-0 CAPLUS
 CN 2-Propen-1-one, 3-[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]-1-(4,6-dimethyl-3-phenylfuro[3,2-c]quinolin-2-yl)- (9CI) (CA INDEX NAME)

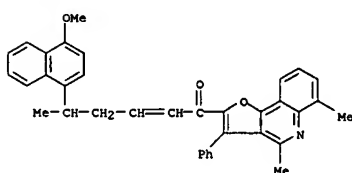
L7 ANSWER 6 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



RN 320411-14-1 CAPLUS
 CN 2H-1-Benzopyran-2-one, 3-[3-(4,6-dimethyl-3-phenylfuro[3,2-c]quinolin-2-yl)-3-oxo-1-propenyl]-4-hydroxy- (9CI) (CA INDEX NAME)

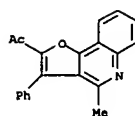


RN 320411-15-2 CAPLUS
 CN 2-Hexen-1-one, 1-[(4,6-dimethyl-3-phenylfuro[3,2-c]quinolin-2-yl)-5-(4-methoxy-1-naphthalenyl)- (9CI) (CA INDEX NAME)

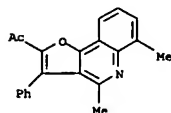


IT 320410-96-6P 320410-97-7P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
 (preparation of cinnamoylfuroquinolines as antimicrobial agents)
 RN 320410-96-6 CAPLUS
 CN Ethanone, 1-(4-methyl-3-phenylfuro[3,2-c]quinolin-2-yl)- (9CI) (CA INDEX NAME)

L7 ANSWER 6 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



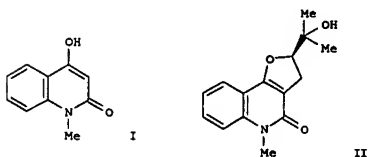
RN 320410-97-7 CAPLUS
 CN Ethanone, 1-(4,6-dimethyl-3-phenylfuro[3,2-c]quinolin-2-yl)- (9CI) (CA INDEX NAME)



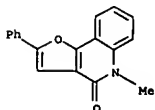
L7 ANSWER 7 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN

RN 2000:719602 CAPLUS
 DN 134:42289
 TI A radical approach to araliopsine and related quinoline alkaloids using manganese(III) acetate
 AU Bar, G.; Parsons, A. F.; Thomas, C. B.
 CS Department of Chemistry, University of York, Heslington, York, YO10 5DD, UK
 SO Tetrahedron Letters (2000), 41(40), 7751-7755
 CODEN: TELEAY; ISSN: 0040-4039
 PB Elsevier Science Ltd.
 DT Journal
 LA English
 OS CASREACT 134:42289
 GI

L7 ANSWER 7 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

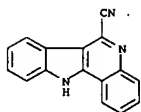


AB Reaction of 4-hydroxy-1-methyl-2(1H)-quinolone (I) with electron-rich alkenes and manganese(III) acetate produces tricyclic quinoline alkaloids, including araliopsine (II), in one-pot reactions. This combined intermol. addition-cyclization reaction produces angular and/or linear tricycles and the regioselectivity of the cyclization is shown to depend on whether alkyl or aryl substituents are attached to the alkene.
 IT 216305-43-0P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (radical approach to araliopsine and related quinoline alkaloids using manganese(III) acetate)
 RN 216305-43-0 CAPLUS
 CN Furo[3,2-c]quinolin-4(5H)-one, 5-methyl-2-phenyl- (9CI) (CA INDEX NAME)



RE.CNT 10 THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

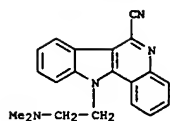
L7 ANSWER 8 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 2000:656740 CAPLUS
 DN 134:29333
 TI Expedient synthesis and cytotoxic activity of new cyanoindolo[3,2-c]quinolines and benzimidazo[1,2-c]quinazolines
 AU Lamazzi, C.; Leonce, S.; Pfeiffer, B.; Renard, G.; Rees, C. W.; Besson, T.
 CS Groupe de Chimie Organique, Pole Sciences et Technologie, UPRES 2001, Laboratoire de Genie Proteique et Cellulaire, Universite de La Rochelle, La Rochelle, 17042, Fr.
 SO Bioorganic & Medicinal Chemistry Letters (2000), 10(19), 2183-2185
 CODEN: BMCLE8; ISSN: 0960-894X
 PB Elsevier Science Ltd.
 DT Journal
 LA English
 OS CASREACT 134:29333
 AB Novel 6-cyanoindolo[3,2-c]quinoline and 6-cyanobenzimidazo[1,2-c]quinazoline deriva. were prepared by treatment of the appropriate aromatic amines with 4,5-dichloro-1,2,3-dithiazolium chloride (Appel salt). The cytotoxicity and the effect of these compds. on cellular growth were measured.
 IT 311330-16-2P
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); RCT (Reactant); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent) (preparation and cytotoxic activity of cyanoindolo[3,2-c]quinolines and benzimidazo[1,2-c]quinazolines)
 RN 311330-16-2 CAPLUS
 CN 11H-Indolo[3,2-c]quinoline-6-carbonitrile (9CI) (CA INDEX NAME)



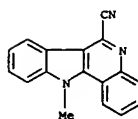
IT 311330-17-3P 311330-18-4P
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation) (preparation and cytotoxic activity of cyanoindolo[3,2-c]quinolines and benzimidazo[1,2-c]quinazolines)
 RN 311330-17-3 CAPLUS
 CN 11H-Indolo[3,2-c]quinoline-6-carbonitrile, 11-[2-(dimethylamino)ethyl]- (9CI) (CA INDEX NAME)

L7 ANSWER 9 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 2000:643792 CAPLUS
 DN 134:9242
 TI Inclusion complex of 3,9-bis(N,N-dimethylcarbamoyloxy)-5H-benzofuro[3,2-c]quinolin e-6-one (KCA-098) with heptakis(2,6-di-O-methyl)-β-cyclodextrin: interaction and dissolution properties
 AU Yamada, Tatsuhiko; Imai, Teruko; Ouchi, Kiyohisa; Otogiri, Masaki; Hirayama, Fumitoshi; Uekama, Kaneto
 CS Pharmaceutical Laboratories, Kissei Pharmaceutical Co., Ltd., Nagano, 399-8304, Japan
 SO Chemical & Pharmaceutical Bulletin (2000), 48(9), 1264-1269
 CODEN: CPBTAL; ISSN: 0009-2363
 PB Pharmaceutical Society of Japan
 DT Journal
 LA English
 AB Interactions of KCA-098 with heptakis(2,6-di-O-methyl)-β-cyclodextrin (DM-β-CyD) in solution and in the solid state were studied by the solubility method, UV and fluorescence spectroscopy, powder x-ray diffractometry, and thermal anal. The KCA-098/DM-β-CyD system showed an AL type solubility diagram with stability consts. of 5870 and 2220 M⁻¹ in aqueous and 10% methanol solns., resp. Following the addition of DM-β-CyD, the maximum UV wavelength of KCA-098 was shifted to a longer wavelength and the fluorescence intensity was decreased. A similar spectral change was observed when KCA-098 was dissolved in less polar solvents, especially in proton-acceptor solvents, such as acetone and dimethylsulfoxide, suggesting that KCA-098 interacts with DM-β-CyD through not only a hydrophobic interaction but also hydrogen bonding. The solid complex of KCA-098 with DM-β-CyD in a molar ratio of 1:1 was prepared by the kneading method and the solvent evaporation method, using organic solvents. Powder x-ray diffractometric and differential scanning calorimetric studies indicated that KCA-098 was dispersed as microparticles on the DM-β-CyD complex in the solid state prepared by the solvent evaporation method although it dispersed as crystals in the sample prepared by the kneading method. The dissoln. of KCA-098 from the solid complex prepared by the former method was markedly faster than that prepared by the latter method, although it slowed down with the passage of time. The reduced dissoln. of KCA-098 was explained by crystallization to the hydrate form in the medium. These data indicate that poorly water-soluble KCA-098 interacts with DM-β-CyD in water and in the solid state and that a fast-dissolving form of KCA-098 can be obtained by evaporating with DM-β-CyD using organic solvents.
 IT 308085-62-3P
 RL: PEP (Physical, engineering or chemical process); FRP (Properties); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); PROC (Process); USES (Uses) (preparation and properties of inclusion complex of KCA-098 with heptakis(2,6-di-O-methyl)-β-cyclodextrin)
 RN 308085-62-3 CAPLUS
 CN β-Cyclodextrin, 2A, 2B, 2C, 2D, 2E, 2F, 2G, 6A, 6B, 6C, 6D, 6E, 6F, 6G-tetradeca-O-methyl-, compd. with 3,9-dihydro-6-oxobenzofuro[3,2-c]quinoline-3,9-diyl bis(dimethylcarbamate) (1:1) (9CI) (CA INDEX NAME)
 CH 1

L7 ANSWER 8 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



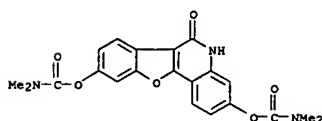
RN 311330-18-4 CAPLUS
 CN 11H-Indolo[3,2-c]quinoline-6-carbonitrile, 11-methyl- (9CI) (CA INDEX NAME)



RE.CMT 15 THERE ARE 15 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 9 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

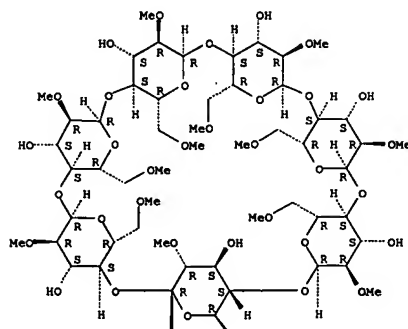
CRN 129794-24-7
 CMF C21 H19 N3 O6



CH 2
 CRN 51166-71-3
 CMF C56 H98 O35

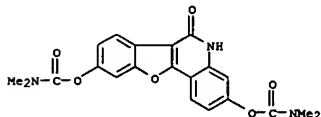
Absolute stereochemistry.

PAGE 1-A



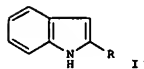
PAGE 2-A

L7 ANSWER 9 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)
 IT 129794-24-7, KCA-098
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (preparation and properties of inclusion complex of KCA-098 with
 heptakis(2,6-di-O-methyl)- β -cyclodextrin)
 RN 129794-24-7 CAPLUS
 CN Carbamic acid, dimethyl-, 5,6-dihydro-6-oxobenzofuro[3,2-c]quinoline-3,9-
 diyl ester (9CI) (CA INDEX NAME)

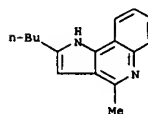


RE.CNT 24 THERE ARE 24 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 10 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 2000:514911 CAPLUS
 DN 133:252337
 TI Versatile indole synthesis by a 5-endo-dig cyclization mediated by
 potassium or cesium bases
 AU Rodriguez, Alain Louis; Koradin, Christopher; Dohle, Wolfgang; Knochel,
 Paul
 CS Department Chemie, Universitat Munchen, Munchen, 81377, Germany
 SO Angewandte Chemie, International Edition (2000), 39(14),
 2488-2490
 CODEN: ACIEF5; ISSN: 1433-7851
 PB Wiley-VCH Verlag GmbH
 DT Journal
 LA English
 OS CASREACT 133:252337
 GI

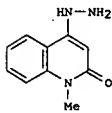


AB The combination of KOtMe3, KH, or CsOMe3 with the polar solvent NMP
 allows a smooth preparation of carious indoles and azaindoles by a
 5-endo-dig
 cyclization. Thus, cyclization of 2-H2NC6H4C.tplbond.CR (R = Ph, Bu,
 2-thienyl, etc.) gave indoles I in good yields.
 IT 288254-82-0P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (endo-dig cyclization of alkynylanilines and derivs. to indoles and
 azaindoles mediated by potassium and cesium bases)
 RN 288254-82-0 CAPLUS
 CN 1H-Pyrrolo[3,2-c]quinoline, 2-butyl-4-methyl- (9CI) (CA INDEX NAME)



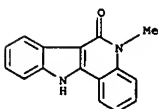
RE.CNT 36 THERE ARE 36 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 11 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 2000:429555 CAPLUS
 DN 133:222650
 TI Chemistry of substituted quinolinones. Part II. Synthesis of novel
 4-pyrazolylquinolinone derivatives
 AU Abass, Mohamed
 CS Department of Chemistry, Faculty of Education, Ain Shams University,
 Cairo, 11711, Egypt
 SO Synthetic Communications (2000), 30(15), 2735-2757
 CODEN: SYNCAV; ISSN: 0039-7911
 PB Marcel Dekker, Inc.
 DT Journal
 LA English
 OS CASREACT 133:222650
 GI



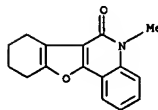
I

AB 4-Hydrazino-1-methyl-2(1H)quinolinone I was treated with
 chlorophthalazine, nitrous acid, isothiocyanates and isatines, and also
 utilized as a precursor for some new 4-pyrazolylquinolinones. Reaction
 of
 I with certain 2-acylquinolinones afforded quinolinylpyrazoloquinolinones
 and/or quinolinylpyrazoloquinolinones.
 IT 85149-47-9P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation of)
 RN 85149-47-9 CAPLUS
 CN 6H-Indolo[3,2-c]quinolin-6-one, 5,11-dihydro-5-methyl- (9CI) (CA INDEX
 NAME)

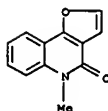


RE.CNT 14 THERE ARE 14 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 12 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 2000:421988 CAPLUS
 DN 133:150751
 TI Efficient synthesis of dihydrofuroquinolinones and furoquinolinones by
 silver(I)/celite promoted oxidative cycloaddition
 AU Lee, Yong Rok; Kim, Byung So; Kwon, Hyuk Il
 CS School of Chemical Engineering and Technology, College of Engineering,
 Yeungnam University, Kyongsan, 712-749, S. Korea
 SO Tetrahedron (2000), 56(24), 3867-3874
 CODEN: TETRAH; ISSN: 0040-4020
 PB Elsevier Science Ltd.
 DT Journal
 LA English
 OS CASREACT 133:150751
 AB A new synthesis of dihydrofuroquinolinones and furoquinolinones is
 achieved from 4-hydroxy-2-quinolones and a variety of olefins in the
 presence of Ag2CO3/Celite in moderate yields. The new method has been
 applied to the synthesis of the pseudoisodictamine.
 IT 113087-45-9P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
 (Reactant or reagent)
 (synthesis of dihydrofuroquinolinones and furoquinolinones via
 silver(I)/celite promoted oxidative cycloaddn.)
 RN 113087-45-9 CAPLUS
 CN Benzofuro[3,2-c]quinolin-6(5H)-one, 7,8,9,10-tetrahydro-5-methyl- (9CI)
 (CA INDEX NAME)

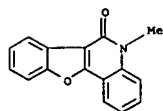


IT 67735-57-3P, Pseudoisodictamine 76870-56-9P
 121673-72-1P 287724-64-5P 287724-65-6P
 287724-66-7P 287724-67-8P 287724-68-9P
 287724-69-0P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (synthesis of dihydrofuroquinolinones and furoquinolinones via
 silver(I)/celite promoted oxidative cycloaddn.)
 RN 67735-57-3 CAPLUS
 CN Furo[3,2-c]quinolin-4(5H)-one, 5-methyl- (6CI, 9CI) (CA INDEX NAME)

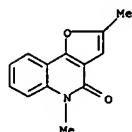


RN 76870-56-9 CAPLUS
 CN Benzofuro[3,2-c]quinolin-6(5H)-one, 5-methyl- (9CI) (CA INDEX NAME)

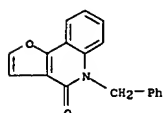
L7 ANSWER 12 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



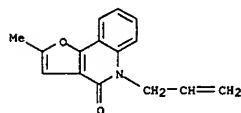
RN 121673-72-1 CAPLUS
CN Furo[3,2-c]quinolin-4(5H)-one, 2,5-dimethyl- (9CI) (CA INDEX NAME)



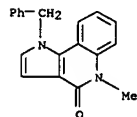
RN 287724-64-5 CAPLUS
CN Furo[3,2-c]quinolin-4(5H)-one, 5-(phenylmethyl)- (9CI) (CA INDEX NAME)



RN 287724-65-6 CAPLUS
CN Furo[3,2-c]quinolin-4(5H)-one, 2-methyl-5-(2-propenyl)- (9CI) (CA INDEX NAME)

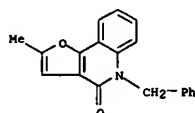


L7 ANSWER 12 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

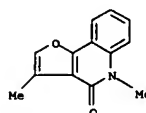


RE.CNT 26 THERE ARE 26 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

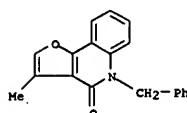
L7 ANSWER 12 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)
RN 287724-66-7 CAPLUS
CN Furo[3,2-c]quinolin-4(5H)-one, 2-methyl-5-(phenylmethyl)- (9CI) (CA INDEX NAME)



RN 287724-67-8 CAPLUS
CN Furo[3,2-c]quinolin-4(5H)-one, 3,5-dimethyl- (9CI) (CA INDEX NAME)

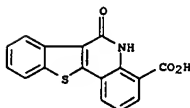


RN 287724-68-9 CAPLUS
CN Furo[3,2-c]quinolin-4(5H)-one, 3-methyl-5-(phenylmethyl)- (9CI) (CA INDEX NAME)



RN 287724-69-0 CAPLUS
CN 4H-Pyrrolo[3,2-c]quinolin-4-one, 1,5-dihydro-5-methyl-1-(phenylmethyl)- (9CI) (CA INDEX NAME)

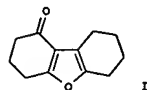
L7 ANSWER 13 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN
AN 2000:411852 CAPLUS
DN 133:193099
TI Synthesis and cytotoxic activity of N-[2-(dimethylamino)ethyl]carboxamide derivatives of benzofuro[2,3-b]quinoline, 6H-quinindoline, indeno[2,1-b]quinoline, and [1]benzothieno[2,3-b]quinoline
AU Bu, Xianrong; Deady, Leslie W.; Denny, William A.
CS Chemistry Department, La Trobe University, Bundoora, 3083, Australia
SO Australian Journal of Chemistry (2000), 53(2), 143-147
CODEN: AJCHAS; ISSN: 0004-9425
PB CSIRO Publishing
DT Journal
LA English
AB The acid precursors of the title compds. were prepared from Me 2-amino-3-formylbenzoate, by Friedlander synthesis with o-methoxy- and o-nitrophenylacetic acids, phenylpyruvic acid, and benzo[b]thiophen-2-one, resp. Except for the last example, cyclization of an initial 3-arylquinoline derivative was then required to give the tetracycle.
Growth inhibition properties of the carboxamides in a series of cancer cell lines were measured for comparison with previous data for an isomeric series. In all cases, the present set were found to be less active.
IT 289657-55-2P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation and cytotoxic activity of N-[2-(dimethylamino)ethyl]carboxamide derivs. of benzofuro[2,3-b]quinoline, 6H-quinindoline, indeno[2,1-b]quinoline, and [1]benzothieno[2,3-b]quinoline)
RN 289657-55-2 CAPLUS
CN [1]Benzothieno[3,2-c]quinoline-4-carboxylic acid, 5,6-dihydro-6-oxo-, monosodium salt (9CI) (CA INDEX NAME)



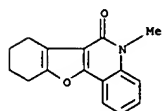
● Na

RE.CNT 18 THERE ARE 18 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 14 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 2000:304478 CAPLUS
 DN 133:43467
 TI One-pot construction of medium- and large-sized ring substituted furans. Efficient conversion to dibenzofurans, coumestans, and 4-pyrones
 AU Lee, Yong Rok; Suk, Jung Yup; Kim, Byung So
 CS School of Chemical Engineering and Technology College of Engineering, Yeungnam University, Kyongsan, 712-749, S. Korea
 SO Organic Letters (2000), 2(10), 1387-1389
 CODEN: ORLEP7; ISSN: 1523-7060
 PB American Chemical Society
 DT Journal
 LA English
 OS CASREACT 133:43467
 GI

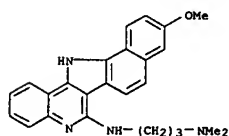


AB New efficient synthesis of medium- and large-sized ring substituted furans, e.g. I, is achieved by cycloaddn. of 1,3-dicarbonyl compds., e.g. 1,3-cyclohexanedione, with vinyl sulfides, e.g. 1-(phenylsulfanyl)-1-cyclohexene, in the presence of Ag2CO3/Celite (Petizon's reagent) in a one-pot procedure. The synthesized furans can be further converted to biol. interesting compds, such as dibenzofurans, coumestans, benzofuroquinolinone, and 4-pyrone.
 IT 113087-45-9P
 RI: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
 (preparation of medium- and large-sized cycloalkano-furans, dibenzofurans, coumestans, and pyrones via cycloaddn. of vinyl sulfides with 1,3-dicarbonyl compds.)
 RN 113087-45-9 CAPLUS
 CN Benzofuro[3,2-c]quinolin-6(5H)-one, 7,8,9,10-tetrahydro-5-methyl- (9CI) (CA INDEX NAME)

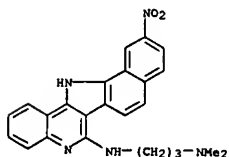


IT 76870-56-9P 113087-46-0P 275817-52-2P
 RI: SPN (Synthetic preparation); PREP (Preparation)

L7 ANSWER 15 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 2000:281647 CAPLUS
 DN 133:160944
 TI 13H-benzo[6,7]indolo[3,2-c]quinolines (B[6,7]IQ): optimization of their DNA triplex-specific stabilization properties
 AU Schmitt, Philippe; Sun, Jian-Sheng; Garestier, Therese; Helene, Claude; Nguyen, Chi Hung; Grierson, David S.; Bisagni, Emile
 CS Lab. Biophys., UMR 8646, CNRS-Museum National d'Histoire Naturelle, INSERM U201, Paris, 75231, Fr.
 SO Chemical Communications (Cambridge) (2000), (9), 763-764
 CODEN: CHCOFS; ISSN: 1359-7345
 PB Royal Society of Chemistry
 DT Journal
 LA English
 AB The triple helix stabilization property of 13H-benzo[6,7]indolo[3,2-c]quinoline was significantly improved by changing the electron-donor acceptor properties of the substituent at position 10 or 11.
 IT 206116-78-1P 287719-95-3P 287719-96-4P
 RI: BPR (Biological process); BSU (Biological study, unclassified); PRP (Properties); RCT (Reactant); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); PROC (Process); RACT (Reactant or reagent)
 (optimization of DNA triplex-specific stabilization properties of 13H-benzo[6,7]indolo[3,2-c]quinolines (B[6,7]IQ))
 RN 206116-78-1 CAPLUS
 CN 1,3-Propanediamine, N'-(10-methoxy-13H-benz[6,7]indolo[3,2-c]quinolin-6-yl)-N,N-dimethyl- (9CI) (CA INDEX NAME)

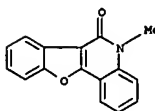


RN 287719-95-3 CAPLUS
 CN 1,3-Propanediamine, N,N-dimethyl-N'-(11-nitro-13H-benz[6,7]indolo[3,2-c]quinolin-6-yl)- (9CI) (CA INDEX NAME)

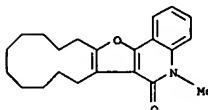


RN 287719-96-4 CAPLUS

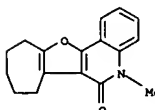
L7 ANSWER 14 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)
 (prepn. of medium- and large-sized cycloalkano-furans, dibenzofurans, coumestans, and pyrones via cycloaddn. of vinyl sulfides with 1,3-dicarbonyl compds.)
 RN 76870-56-9 CAPLUS
 CN Benzofuro[3,2-c]quinolin-6(5H)-one, 5-methyl- (9CI) (CA INDEX NAME)



RN 113087-46-0 CAPLUS
 CN Cyclododeca[4,5]furo[3,2-c]quinolin-6(5H)-one, 7,8,9,10,11,12,13,14,15,16-decahydro-5-methyl- (9CI) (CA INDEX NAME)

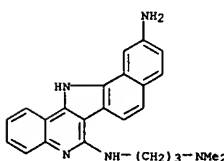


RN 275817-52-2 CAPLUS
 CN 6H-Cyclohepta[4,5]furo[3,2-c]quinolin-6-one, 5,7,8,9,10,11-hexahydro-5-methyl- (9CI) (CA INDEX NAME)

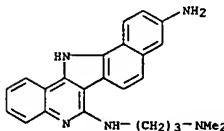


RE.CNT 49 THERE ARE 49 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

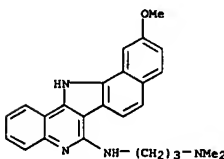
L7 ANSWER 15 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)
 CN 13H-Benz[6,7]indolo[3,2-c]quinoline-6,11-diamine, N6-[3-(dimethylamino)propyl]- (9CI) (CA INDEX NAME)



RN 287719-97-5 CAPLUS
 CN 13H-Benz[6,7]indolo[3,2-c]quinoline-6,10-diamine, N6-[3-(dimethylamino)propyl]- (9CI) (CA INDEX NAME)

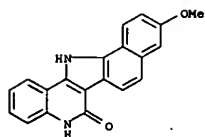


RN 287719-98-6 CAPLUS
 CN 1,3-Propanediamine, N'-(11-methoxy-13H-benz[6,7]indolo[3,2-c]quinolin-6-yl)-N,N-dimethyl- (9CI) (CA INDEX NAME)

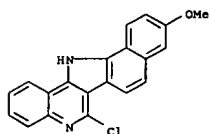


IT 206116-84-9P 206116-85-0P 287719-99-5P
 287719-90-6P 287719-91-9P 287719-92-0P
 287719-93-1P 287719-94-2P
 RI: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
 (optimization of DNA triplex-specific stabilization properties of 13H-benzo[6,7]indolo[3,2-c]quinolines (B[6,7]IQ))
 RN 206116-84-9 CAPLUS
 CN 6H-Benz[6,7]indolo[3,2-c]quinolin-6-one, 5,13-dihydro-10-methoxy- (9CI)

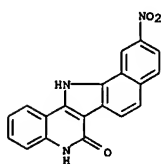
L7 ANSWER 15 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



RN 206116-85-0 CAPLUS
CN 13H-Benz[6,7]indolo[3,2-c]quinoline, 6-chloro-10-methoxy- (9CI) (CA INDEX NAME)

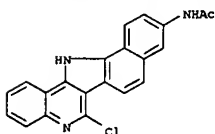


RN 287719-89-5 CAPLUS
CN 6H-Benz[6,7]indolo[3,2-c]quinolin-6-one, 5,13-dihydro-11-methoxy- (9CI) (CA INDEX NAME)

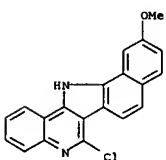


RN 287719-90-8 CAPLUS
CN Acetamide, N-(6,13-dihydro-6-oxo-5H-benz[6,7]indolo[3,2-c]quinolin-10-yl)- (9CI) (CA INDEX NAME)

L7 ANSWER 15 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

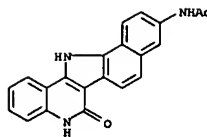


RN 287719-94-2 CAPLUS
CN 13H-Benz[6,7]indolo[3,2-c]quinoline, 6-chloro-11-methoxy- (9CI) (CA INDEX NAME)

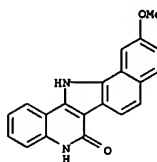


RE.CNT 19 THERE ARE 19 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

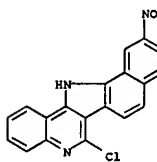
L7 ANSWER 15 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



RN 287719-91-9 CAPLUS
CN 6H-Benz[6,7]indolo[3,2-c]quinolin-6-one, 5,13-dihydro-11-methoxy- (9CI) (CA INDEX NAME)



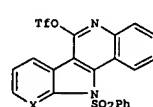
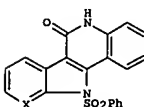
RN 287719-92-0 CAPLUS
CN 13H-Benz[6,7]indolo[3,2-c]quinolin-6-one, 5,13-dihydro-11-nitro- (9CI) (CA INDEX NAME)



RN 287719-93-1 CAPLUS
CN Acetamide, N-(6-chloro-13H-benz[6,7]indolo[3,2-c]quinolin-10-yl)- (9CI) (CA INDEX NAME)

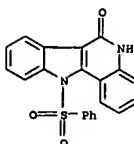
L7 ANSWER 16 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN

AN 2000:278940 CAPLUS
DN 133:73960
TI Synthesis of indolo[3,2-c]quinoline and pyrrolo[3,2-c]quinoline derivatives
AU Mouadib, Abderrahim; Joseph, Benoit; Hasnaoui, Aissa; Merour, Jean-Yves
CS Institut de Chimie Organique et Analytique Associe au CNRS, Universite d'Orleans, Orleans, 45067, Fr.
SO Synthesis (2000), (4), 549-556
CODEN: SYNTBF; ISSN: 0039-7881
PB Georg Thieme Verlag
DT Journal
LA English
OS CASREACT 133:73960
GI



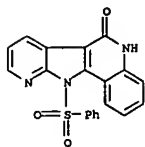
AB Potential antitumor scaffold indolo[3,2-c]quinoline I (X = CH) was obtained by an intramol. Heck cyclization from the corresponding N-(2-iodophenyl)-3-indolecarboxamide. The 7-azaindole analog II (X = N) was prepared by the same approach. Triflate displacement of compds. II (X = CH, N) according to Suzuki and Stille reactions gave 6-substituted deriva.

IT 278593-22-9P 278593-23-0P 278593-25-2P
278593-26-3P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of indolo[3,2-c]quinoline and pyrrolo[3,2-c]pyrrolo[3,2-c]quinoline deriva.)
RN 278593-22-9 CAPLUS
CN 6H-Indolo[3,2-c]quinolin-6-one, 5,11-dihydro-11-(phenylsulfonyl)- (9CI) (CA INDEX NAME)

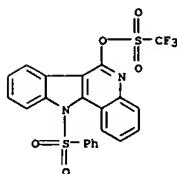


RN 278593-23-0 CAPLUS
CN 6H-Pyrrolo[3,2-c]pyrrolo[3,2-c]quinolin-6-one, 5,11-dihydro-11-

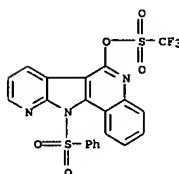
L7 ANSWER 16 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)
(phenylsulfonyl)- (9CI) (CA INDEX NAME)



RN 278593-25-2 CAPLUS
CN Methanesulfonic acid, trifluoro-, 11-(phenylsulfonyl)-11H-indolo[3,2-c]quinolin-6-yl ester (9CI) (CA INDEX NAME)

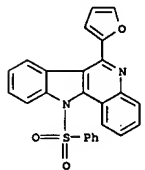


RN 278593-26-3 CAPLUS
CN Methanesulfonic acid, trifluoro-, 11-(phenylsulfonyl)-11H-pyrido[3',2':4,5]pyrrolo[3,2-c]quinolin-6-yl ester (9CI) (CA INDEX NAME)

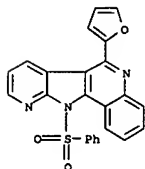


IT 278593-24-1P 278593-27-4P 278593-28-5P
278593-29-6P 278593-30-9P 278593-31-0P
278593-32-1P 278593-33-2P 278593-34-3P

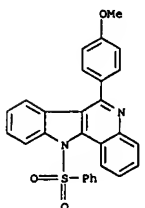
L7 ANSWER 16 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



RN 278593-29-6 CAPLUS
CN 11H-Pyrdo[3',2':4,5]pyrrolo[3,2-c]quinoline, 6-(2-furanyl)-11-(phenylsulfonyl)- (9CI) (CA INDEX NAME)



RN 278593-30-9 CAPLUS
CN 11H-Indolo[3,2-c]quinoline, 6-(4-methoxyphenyl)-11-(phenylsulfonyl)- (9CI) (CA INDEX NAME)

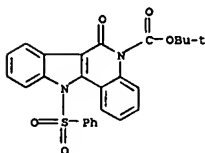


RN 278593-31-0 CAPLUS
CN 11H-Pyrdo[3',2':4,5]pyrrolo[3,2-c]quinoline, 6-(4-methoxyphenyl)-11-(phenylsulfonyl)- (9CI) (CA INDEX NAME)

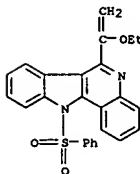
L7 ANSWER 16 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)
278593-35-4P

RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of indolo[3,2-c]quinoline and pyrdo[3',2':4,5]pyrrolo[3,2-c]quinoline derivs.)

RN 278593-24-1 CAPLUS
CN 5H-Indolo[3,2-c]quinoline-5-carboxylic acid, 6,11-dihydro-6-oxo-11-(phenylsulfonyl)-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

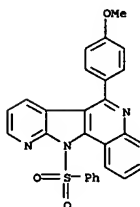


RN 278593-27-4 CAPLUS
CN 11H-Indolo[3,2-c]quinoline, 6-(1-ethoxyethyl)-11-(phenylsulfonyl)- (9CI) (CA INDEX NAME)

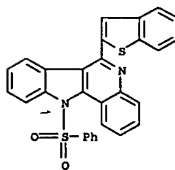


RN 278593-28-5 CAPLUS
CN 11H-Indolo[3,2-c]quinoline, 6-(2-furanyl)-11-(phenylsulfonyl)- (9CI) (CA INDEX NAME)

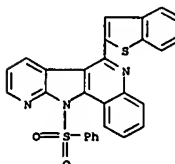
L7 ANSWER 16 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



RN 278593-32-1 CAPLUS
CN 11H-Indolo[3,2-c]quinoline, 6-benzo[b]thien-2-yl-11-(phenylsulfonyl)- (9CI) (CA INDEX NAME)



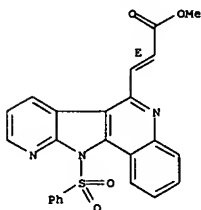
RN 278593-33-2 CAPLUS
CN 11H-Pyrdo[3',2':4,5]pyrrolo[3,2-c]quinoline, 6-benzo[b]thien-2-yl-11-(phenylsulfonyl)- (9CI) (CA INDEX NAME)



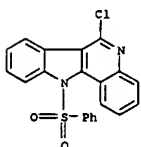
RN 278593-34-3 CAPLUS
CN 2-Propenoic acid, 3-(11-(phenylsulfonyl)-11H-pyrdo[3',2':4,5]pyrrolo[3,2-c]quinolin-6-yl)- (9CI) (CA INDEX NAME)

L7 ANSWER 16 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)
c]quinolin-6-yl]-, methyl ester, (2E)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



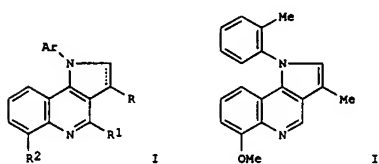
RN 278593-35-4 CAPLUS
CN 11H-Indolo[3,2-c]quinoline, 6-chloro-11-(phenylsulfonyl)- (9CI) (CA INDEX NAME)



RE.CNT 38 THERE ARE 38 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

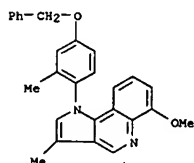
L7 ANSWER 17 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN
AN 2000:34875 CAPLUS
DN 132:93305
TI Preparation of 3-alkylpyrrolo[3,2-c]quinoline derivatives useful as
gastric acid secretion inhibitors
IN Choi, Joong-Kwon; Yum, Eul Kgun; Kim, Sung Soo; Kang, Seung Kyu; Cheon,
Hyea Gyeong; Kim, Myo Jung
PA Korea Research Institute of Chemical Technology, S. Korea
SO PCT Int. Appl., 73 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000001696	A1	20000113	WO 1999-KR346	19990630
W: CA, JP, US RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
CA 2301510	AA	20000113	CA 1999-2301510	19990630
EP 1009748	A1	20000621	EP 1999-929924	19990630
R: DE, FR, GB, IT				
JP 2002519424	T2	20020702	JP 2000-558099	19990630
FR/1998-26506	A	19980702		
WO 1999-KR346	W	19990630		
OS MARPAT 132:93305				
GI				

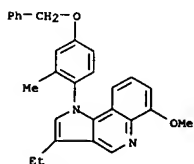


AB The invention relates to 3-alkylpyrrolo[3,2-c]quinoline derivs. I, their
pharmaceutically acceptable salts, a process for their preparation, and
their
pharmaceutical compns. for treating gastric ulcer [wherein: R = alkyl
which may be substituted with OH, alkoxycarbonyl, alkylcarbonyl,
arylcabonyl, etc.; R1 = H, alkyl, Ph, CH2OH, halo, alkylthio, alkoxy, or
Cl-8 amino with optional OH; R2 = H, alkyl, alkoxy, hydroxyalkoxy,
fluoroalkoxy, OH, CH2OH, or Cl-8 amino; Ar = (un)substituted Ph or
CH2Ph].
Examples include 31 synthetic examples, 3 formulation examples, 2
bioassays, and a toxicity test. For instance, 4-chloro-3-iodo-8-

L7 ANSWER 17 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)
methoxyquinoline underwent condensation with 2-methylaniline at the
4-position (83%), followed by allylation with allyl iodide and
Pd-catalyzed cyclization (77%), to give title compd. II. This compd. was
stronger than omeprazole in the inhibition of H+/K+-ATPase in vitro, and
against ethanol-induced gastric ulcer in rats.
IT 254435-30-8P, 3-Methyl-6-methoxy-1-(4-benzyloxy-2-methylphenyl)-1H-
pyrrolo[3,2-c]quinoline 254435-31-9P, 1-(4-Benzyloxy-2-
methylphenyl)-3-ethyl-6-methoxy-1H-pyrrolo[3,2-c]quinoline
254435-56-8P, 6-Methoxy-3-methyl-1-(2-methylphenyl)-2-
(trimethylsilyl)-1H-pyrrolo[3,2-c]quinoline
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
(Reactant or reagent)
(intermediate; preparation of alkylpyrroloquinoline derivs. as
gastric acid
secretion inhibitors)
RN 254435-30-8 CAPLUS
CN 1H-Pyrrolo[3,2-c]quinoline, 6-methoxy-3-methyl-1-(2-methyl-4-
phenylmethoxy)phenyl]- (9CI) (CA INDEX NAME)

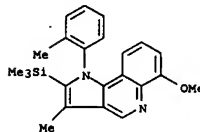


RN 254435-31-9 CAPLUS
CN 1H-Pyrrolo[3,2-c]quinoline, 3-ethyl-6-methoxy-1-(2-methyl-4-
phenylmethoxy)phenyl]- (9CI) (CA INDEX NAME)

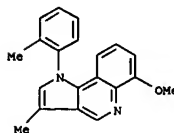


RN 254435-56-8 CAPLUS
CN 1H-Pyrrolo[3,2-c]quinoline, 6-methoxy-3-methyl-1-(2-methylphenyl)-2-
(trimethylsilyl)- (9CI) (CA INDEX NAME)

L7 ANSWER 17 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



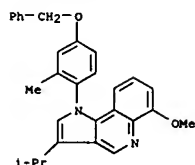
IT 254435-59-1
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(pharmaceutical compns. containing; preparation of
alkylpyrroloquinoline derivs.
as gastric acid secretion inhibitors)
RN 254435-59-1 CAPLUS
CN 1H-Pyrrolo[3,2-c]quinoline, 6-methoxy-3-methyl-1-(2-methylphenyl)-,
hydrochloride (9CI) (CA INDEX NAME)



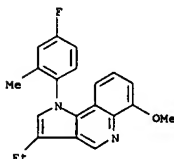
• x HCl

IT 254435-32-0, 1-(4-Benzyloxy-2-methylphenyl)-3-isopropyl-6-methoxy-
1H-pyrrolo[3,2-c]quinoline
RL: RCT (Reactant); RACT (Reactant or reagent)
(starting material; preparation of alkylpyrroloquinoline derivs. as
gastric
acid secretion inhibitors)
RN 254435-32-0 CAPLUS
CN 1H-Pyrrolo[3,2-c]quinoline, 6-methoxy-3-(1-methylethyl)-1-(2-methyl-4-
phenylmethoxy)phenyl]- (9CI) (CA INDEX NAME)

L7 ANSWER 17 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

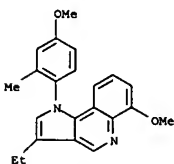


IT 230648-20-1P, 3-Ethyl-1-(4-fluoro-2-methylphenyl)-6-methoxy-1H-pyrrolo[3,2-c]quinoline
 RL: ADV (Adverse effect, including toxicity); BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
 (target compound; preparation of alkylpyrroloquinoline derivs. as gastric acid secretion inhibitors)
 RN 230648-20-1 CAPLUS
 CN 1H-Pyrrolo[3,2-c]quinoline,
 3-ethyl-1-(4-fluoro-2-methylphenyl)-6-methoxy-
 (9CI) (CA INDEX NAME)

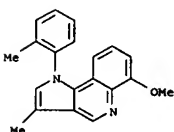


IT 230648-14-3P, 1-(4-Methoxy-2-methylphenyl)-6-methoxy-3-methyl-1H-pyrrolo[3,2-c]quinoline 230648-15-4P, 1-(4-Methoxy-2-methylphenyl)-6-methoxy-3-ethyl-1H-pyrrolo[3,2-c]quinoline 230648-18-7P, 6-Methoxy-3-methyl-1-(2-methylphenyl)-1H-pyrrolo[3,2-c]quinoline 230648-19-8P, 1-(4-Fluoro-2-methylphenyl)-6-methoxy-3-methyl-1H-pyrrolo[3,2-c]quinoline 252728-46-6P, 6-Hydroxy-3-methyl-1-(2-methylphenyl)-1H-pyrrolo[3,2-c]quinoline 252728-48-6P, 3-Isopropyl-6-methoxy-1-(2-methylphenyl)-1H-pyrrolo[3,2-c]quinoline 252728-49-7P, 6-Methoxy-3-(hydroxymethyl)-1-(2-methylphenyl)-1H-pyrrolo[3,2-c]quinoline 252728-50-0P, 6-Methoxy-3-(2-hydroxyethyl)-1-(2-methylphenyl)-1H-pyrrolo[3,2-c]quinoline 252728-51-1P, 1-(4-Fluoro-2-methylphenyl)-6-methoxy-3-(hydroxymethyl)-1H-pyrrolo[3,2-c]quinoline 252728-52-2P, 1-(4-Fluoro-2-methylphenyl)-6-methoxy-3-(2-

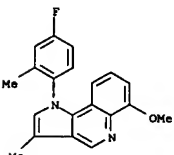
L7 ANSWER 17 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)
 CN 1H-Pyrrolo[3,2-c]quinoline,
 3-ethyl-6-methoxy-1-(4-methoxy-2-methylphenyl)-
 (9CI) (CA INDEX NAME)



RN 230648-18-7 CAPLUS
 CN 1H-Pyrrolo[3,2-c]quinoline, 6-methoxy-3-methyl-1-(2-methylphenyl)- (9CI) (CA INDEX NAME)



RN 230648-19-8 CAPLUS
 CN 1H-Pyrrolo[3,2-c]quinoline,
 1-(4-fluoro-2-methylphenyl)-6-methoxy-3-methyl-
 (9CI) (CA INDEX NAME)



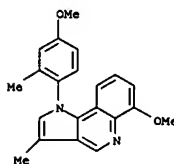
RN 252728-46-4 CAPLUS
 CN 1H-Pyrrolo[3,2-c]quinolin-6-ol, 3-methyl-1-(2-methylphenyl)- (9CI) (CA INDEX NAME)

L7 ANSWER 17 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

hydroxyethyl)-1H-pyrrolo[3,2-c]quinoline 252728-55-5P, 6-(Trifluoromethoxy)-3-methyl-1-(2-methylphenyl)-1H-pyrrolo[3,2-c]quinoline 252728-56-6P, 6-Methoxy-3,4-dimethyl-1-(2-methylphenyl)-1H-pyrrolo[3,2-c]quinoline 252728-57-7P, 1-(4-Fluoro-2-methylphenyl)-6-methoxy-3,4-dimethyl-1H-pyrrolo[3,2-c]quinoline 252728-58-8P, 1-(4-Hydroxy-2-methylphenyl)-3-ethyl-6-methoxy-1H-pyrrolo[3,2-c]quinoline 252728-59-9P, 1-(4-Hydroxy-2-methylphenyl)-3-isopropyl-6-methoxy-1H-pyrrolo[3,2-c]quinoline 254435-27-3P, 3-Ethyl-6-methoxy-1-(2-methylphenyl)-1H-pyrrolo[3,2-c]quinoline 254435-28-4P, 1-(4-Hydroxy-2-methylphenyl)-6-methoxy-3-methyl-1H-pyrrolo[3,2-c]quinoline 254435-33-1P, 6-Methoxy-3-methyl-1-(1-phenylethyl)-1H-pyrrolo[3,2-c]quinoline 254435-35-3P, 3-Ethyl-6-methoxy-1-(1-phenylethyl)-1H-pyrrolo[3,2-c]quinoline 254435-38-6P, 3-Ethyl-6-methoxy-4-methyl-1-(2-methylphenyl)-1H-pyrrolo[3,2-c]quinoline 254435-39-7P, 3-Ethyl-4-methyl-6-methoxy-1-(4-fluoro-2-methylphenyl)-1H-pyrrolo[3,2-c]quinoline 254435-40-0P, 6-(2-Hydroxyethoxy)-3-methyl-1-(2-methylphenyl)-1H-pyrrolo[3,2-c]quinoline 254435-45-5P,

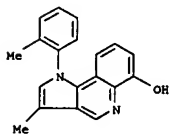
3-Ethyl-6-(trifluoromethoxy)-1-(2-methylphenyl)-1H-pyrrolo[3,2-c]quinoline 254435-46-6P, 3-Isopropyl-6-(trifluoromethoxy)-1-(2-methylphenyl)-1H-pyrrolo[3,2-c]quinoline 254435-47-7P, 1-(4-Fluoro-2-methylphenyl)-6-(trifluoromethoxy)-3-methyl-1H-pyrrolo[3,2-c]quinoline 254435-49-9P, 3-Ethyl-1-(4-fluoro-2-methylphenyl)-6-(trifluoromethoxy)-1H-pyrrolo[3,2-c]quinoline 254435-50-2P, 6-(2,2,2-Trifluoroethoxy)-3-methyl-1-(2-methylphenyl)-1H-pyrrolo[3,2-c]quinoline 254435-57-9P, 1-(4-Methoxy-2-methylphenyl)-6-methoxy-3-(hydroxymethyl)-1H-pyrrolo[3,2-c]quinoline 254435-58-0P, 1-(4-Methoxy-2-methylphenyl)-6-methoxy-3-(2-hydroxyethyl)-1H-pyrrolo[3,2-c]quinoline
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
 (target compd.; prepn. of alkylpyrroloquinoline derivs. as gastric acid secretion inhibitors)

RN 230648-14-3 CAPLUS
 CN 1H-Pyrrolo[3,2-c]quinoline, 6-methoxy-1-(4-methoxy-2-methylphenyl)-3-methyl- (9CI) (CA INDEX NAME)

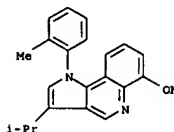


RN 230648-15-4 CAPLUS

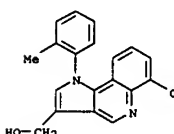
L7 ANSWER 17 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



RN 252728-48-6 CAPLUS
 CN 1H-Pyrrolo[3,2-c]quinoline,
 6-methoxy-3-(1-methylethyl)-1-(2-methylphenyl)-
 (9CI) (CA INDEX NAME)

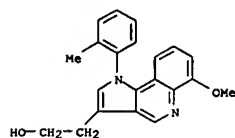


RN 252728-49-7 CAPLUS
 CN 1H-Pyrrolo[3,2-c]quinoline-3-methanol, 6-methoxy-1-(2-methylphenyl)- (9CI) (CA INDEX NAME)

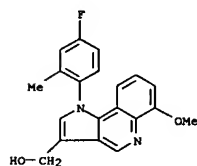


RN 252728-50-0 CAPLUS
 CN 1H-Pyrrolo[3,2-c]quinoline-3-ethanol, 6-methoxy-1-(2-methylphenyl)- (9CI) (CA INDEX NAME)

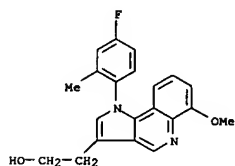
L7 ANSWER 17 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



RN 252728-51-1 CAPLUS
 CN 1H-Pyrrolo[3,2-c]quinoline-3-methanol, 1-(4-fluoro-2-methylphenyl)-6-methoxy- (9CI) (CA INDEX NAME)

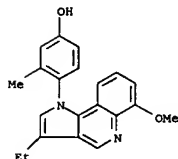


RN 252728-52-2 CAPLUS
 CN 1H-Pyrrolo[3,2-c]quinoline-3-ethanol, 1-(4-fluoro-2-methylphenyl)-6-methoxy- (9CI) (CA INDEX NAME)

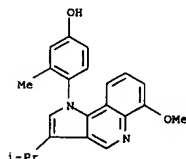


RN 252728-55-5 CAPLUS
 CN 1H-Pyrrolo[3,2-c]quinoline, 3-methyl-1-(2-methylphenyl)-6-(trifluoromethoxy)- (9CI) (CA INDEX NAME)

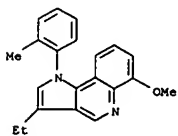
L7 ANSWER 17 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



RN 252728-59-9 CAPLUS
 CN Phenol, 4-[6-methoxy-3-(1-methylethyl)-1H-pyrrolo[3,2-c]quinolin-1-yl]-3-methyl- (9CI) (CA INDEX NAME)

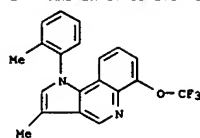


RN 254435-27-3 CAPLUS
 CN 1H-Pyrrolo[3,2-c]quinoline, 3-ethyl-6-methoxy-1-(2-methylphenyl)- (9CI) (CA INDEX NAME)

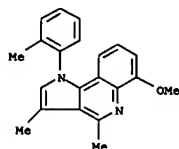


RN 254435-28-4 CAPLUS
 CN Phenol, 4-(6-methoxy-3-methyl-1H-pyrrolo[3,2-c]quinolin-1-yl)-3-methyl- (9CI) (CA INDEX NAME)

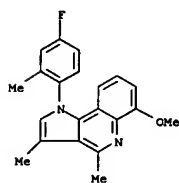
L7 ANSWER 17 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



RN 252728-56-6 CAPLUS
 CN 1H-Pyrrolo[3,2-c]quinoline, 6-methoxy-3,4-dimethyl-1-(2-methylphenyl)- (9CI) (CA INDEX NAME)

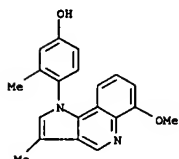


RN 252728-57-7 CAPLUS
 CN 1H-Pyrrolo[3,2-c]quinoline, 1-(4-fluoro-2-methylphenyl)-6-methoxy-3,4-dimethyl- (9CI) (CA INDEX NAME)

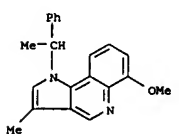


RN 252728-58-8 CAPLUS
 CN Phenol, 4-(3-ethyl-6-methoxy-1H-pyrrolo[3,2-c]quinolin-1-yl)-3-methyl- (9CI) (CA INDEX NAME)

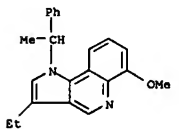
L7 ANSWER 17 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



RN 254435-33-1 CAPLUS
 CN 1H-Pyrrolo[3,2-c]quinoline, 6-methoxy-3-methyl-1-(1-phenylethyl)- (9CI) (CA INDEX NAME)

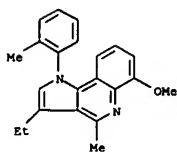


RN 254435-35-3 CAPLUS
 CN 1H-Pyrrolo[3,2-c]quinoline, 3-ethyl-6-methoxy-1-(1-phenylethyl)- (9CI) (CA INDEX NAME)

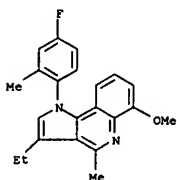


RN 254435-38-6 CAPLUS
 CN 1H-Pyrrolo[3,2-c]quinoline, 3-ethyl-6-methoxy-4-methyl-1-(2-methylphenyl)- (9CI) (CA INDEX NAME)

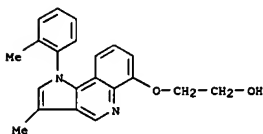
L7 ANSWER 17 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



RN 254435-39-7 CAPLUS
 CN 1H-Pyrrolo[3,2-c]quinoline,
 3-ethyl-1-(4-fluoro-2-methylphenyl)-6-methoxy-
 4-methyl- (9CI) (CA INDEX NAME)

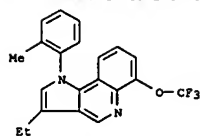


RN 254435-40-0 CAPLUS
 CN Ethanol, 2-([3-methyl-1-(2-methylphenyl)-1H-pyrrolo[3,2-c]quinolin-6-yl]oxy)- (9CI) (CA INDEX NAME)

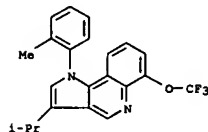


RN 254435-45-5 CAPLUS
 CN 1H-Pyrrolo[3,2-c]quinoline, 3-ethyl-1-(2-methylphenyl)-6-(trifluoromethoxy)- (9CI) (CA INDEX NAME)

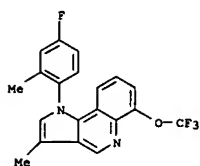
L7 ANSWER 17 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



RN 254435-46-6 CAPLUS
 CN 1H-Pyrrolo[3,2-c]quinoline, 3-(1-methylethyl)-1-(2-methylphenyl)-6-(trifluoromethoxy)- (9CI) (CA INDEX NAME)

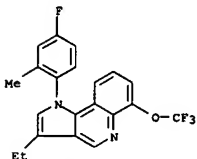


RN 254435-47-7 CAPLUS
 CN 1H-Pyrrolo[3,2-c]quinoline, 1-(4-fluoro-2-methylphenyl)-3-methyl-6-(trifluoromethoxy)- (9CI) (CA INDEX NAME)

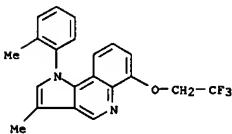


RN 254435-49-9 CAPLUS
 CN 1H-Pyrrolo[3,2-c]quinoline, 3-ethyl-1-(4-fluoro-2-methylphenyl)-6-(trifluoromethoxy)- (9CI) (CA INDEX NAME)

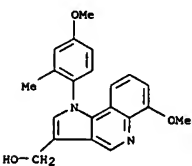
L7 ANSWER 17 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



RN 254435-50-2 CAPLUS
 CN 1H-Pyrrolo[3,2-c]quinoline, 3-methyl-1-(2-methylphenyl)-6-(2,2,2-trifluoroethoxy)- (9CI) (CA INDEX NAME)

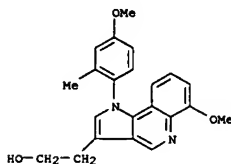


RN 254435-57-9 CAPLUS
 CN 1H-Pyrrolo[3,2-c]quinoline-3-methanol, 6-methoxy-1-(4-methoxy-2-methylphenyl)- (9CI) (CA INDEX NAME)



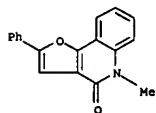
RN 254435-58-0 CAPLUS
 CN 1H-Pyrrolo[3,2-c]quinoline-3-ethanol, 6-methoxy-1-(4-methoxy-2-methylphenyl)- (9CI) (CA INDEX NAME)

L7 ANSWER 17 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



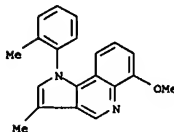
RE.CNT 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 18 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 1999:797957 CAPLUS
 DN 132:137306
 TI CAN-mediated formation of furopyranones and furoquinolinones
 AU Kobayashi, Kazuhiro; Sakashita, Kouji; Akamatsu, Hideki; Tanaka, Koujiro;
 Uchida, Masaharu; Uneda, Tomokazu; Kitamura, Taichi; Morikawa, Osamu;
 Konishi, Misatoshi
 CS Department of Materials Science, Faculty of Engineering, Tottori
 University, Tottori, 680-8552, Japan
 SO Heterocycles (1999), 51(12), 2881-2892
 CODEN: HETCYM; ISSN: 0365-5414
 PB Japan Institute of Heterocyclic Chemistry
 DT Journal
 LA English
 OS CASREACT 132:137306
 AB The reaction of 4-hydroxy-2H-pyran-2-one derivs. with a range of alkenes
 or phenylacetylene in acetonitrile containing cerium(IV) ammonium nitrate
 (CAN) afforded the corresponding furo[3,2-c]pyranone and/or
 furo[2,3-b]pyranone derivs. Similar treatment of 4-hydroxy-1-
 methylquinolin-2(1H)-one with alkenes or phenylacetylene in the presence
 of CAN gave furo[3,2-c]quinolin-4(5H)-one derivs.
 IT 216305-43-0P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (CAN-mediated cycloaddn. of hydroxypyranones or hydroxyquinolinones
 with alkenes or phenylacetylene)
 RN 216305-43-0 CAPLUS
 CN Furo[3,2-c]quinolin-4(5H)-one, 5-methyl-2-phenyl- (9CI) (CA INDEX NAME)



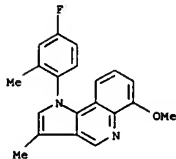
RE.CNT 58 THERE ARE 58 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 19 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 1999:662318 CAPLUS
 DN 132:49901
 TI Synthesis and pharmacological profile of 1-aryl-3-substituted
 pyrrolo[3,2-c]quinolines
 AU Yum, Eul Kgun; Kang, Seung Kyu; Kim, Sung Soo; Choi, Joong-Kwon; Cheon,
 Hyea Gyeong
 CS Korea Research Institute of Chemical Technology, Taejeon, 305-600, S.
 Korea
 SO Bioorganic & Medicinal Chemistry Letters (1999), 9(19),
 2819-2822
 CODEN: BMCLE6; ISSN: 0960-894X
 PB Elsevier Science Ltd.
 DT Journal
 LA English
 AB A series of 1-aryl-3-substituted pyrrolo[3,2-c]quinolines were
 synthesized
 and evaluated for their anti-ulcer activity. While 3-substituents of
 pyrrolo[3,2-c]quinolines mostly affected the in vitro H⁺/K⁺ ATPase
 activity, 1-aryl substituents of pyrrolo[3,2-c]quinolines affected the in
 vivo gastric acid secretion. In addition, the compds. with good in vivo
 activity protected from ethanol-induced ulcer.
 IT 230648-18-7P 230648-19-8P 230648-20-1P
 252728-46-4P 252728-48-6P 252728-49-7P
 252728-50-0P 252728-51-1P 252728-52-2P
 252728-53-3P 252728-55-5P 252728-56-6P
 252728-57-7P 252728-58-8P 252728-59-9P
 RL: BAC (Biological activity or effector, except adverse); BSU
 (Biological
 study, unclassified); SPN (Synthetic preparation); BIOL (Biological
 study); PREP (Preparation)
 (Preparation of (aryl)pyrrolo[3,2-c]quinolines as antiulcer agents)
 RN 230648-18-7 CAPLUS
 CN 1H-Pyrrolo[3,2-c]quinoline, 6-methoxy-3-methyl-1-(2-methylphenyl)- (9CI)
 (CA INDEX NAME)

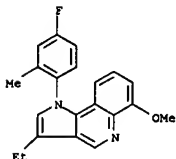


RN 230648-19-8 CAPLUS
 CN 1H-Pyrrolo[3,2-c]quinoline,
 1-(4-fluoro-2-methylphenyl)-6-methoxy-3-methyl-
 (9CI) (CA INDEX NAME)

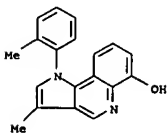
L7 ANSWER 19 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



RN 230648-20-1 CAPLUS
 CN 1H-Pyrrolo[3,2-c]quinoline,
 3-ethyl-1-(4-fluoro-2-methylphenyl)-6-methoxy-
 (9CI) (CA INDEX NAME)

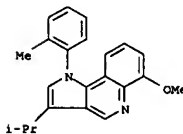


RN 252728-46-4 CAPLUS
 CN 1H-Pyrrolo[3,2-c]quinolin-6-ol, 3-methyl-1-(2-methylphenyl)- (9CI) (CA
 INDEX NAME)

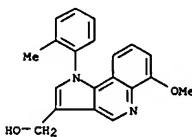


RN 252728-48-6 CAPLUS
 CN 1H-Pyrrolo[3,2-c]quinoline,
 6-methoxy-3-(1-methylethyl)-1-(2-methylphenyl)-
 (9CI) (CA INDEX NAME)

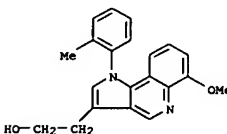
L7 ANSWER 19 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



RN 252728-49-7 CAPLUS
 CN 1H-Pyrrolo[3,2-c]quinoline-3-methanol, 6-methoxy-1-(2-methylphenyl)-
 (9CI)
 (CA INDEX NAME)

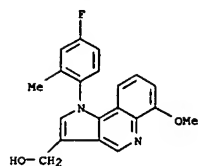


RN 252728-50-0 CAPLUS
 CN 1H-Pyrrolo[3,2-c]quinoline-3-ethanol, 6-methoxy-1-(2-methylphenyl)- (9CI)
 (CA INDEX NAME)

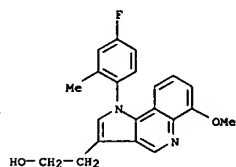


RN 252728-51-1 CAPLUS
 CN 1H-Pyrrolo[3,2-c]quinoline-3-methanol, 1-(4-fluoro-2-methylphenyl)-6-
 methoxy- (9CI) (CA INDEX NAME)

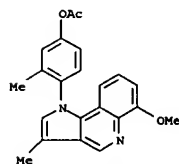
L7 ANSWER 19 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



RN 252728-52-2 CAPLUS
CN 1H-Pyrrolo[3,2-c]quinoline-3-ethanol, 1-(4-fluoro-2-methylphenyl)-6-methoxy- (9CI) (CA INDEX NAME)

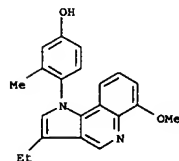


RN 252728-53-3 CAPLUS
CN Phenol, 4-(6-methoxy-3-methyl-1H-pyrrolo[3,2-c]quinolin-1-yl)-3-methyl-, acetate (ester) (9CI) (CA INDEX NAME)

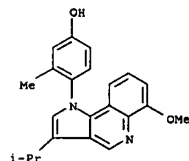


RN 252728-55-5 CAPLUS
CN 1H-Pyrrolo[3,2-c]quinoline, 3-methyl-1-(2-methylphenyl)-6-(trifluoromethoxy)- (9CI) (CA INDEX NAME)

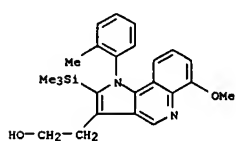
L7 ANSWER 19 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



RN 252728-59-9 CAPLUS
CN Phenol, 4-[6-methoxy-3-(1-methylethyl)-1H-pyrrolo[3,2-c]quinolin-1-yl]-3-methyl- (9CI) (CA INDEX NAME)

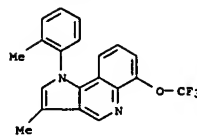


IT 232922-93-9P 252728-71-5P 252728-72-6P
252728-74-8P 252728-75-9P
RI: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of (aryl)pyrrolo[3,2-c]quinolines as antiulcer agents)
RN 232922-93-9 CAPLUS
CN 1H-Pyrrolo[3,2-c]quinoline-3-ethanol, 6-methoxy-1-(2-methylphenyl)-2-(trimethylsilyl)- (9CI) (CA INDEX NAME)

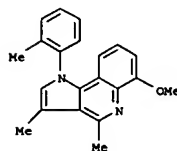


RN 252728-71-5 CAPLUS
CN 1H-Pyrrolo[3,2-c]quinolin-6-ol, 3-methyl-1-(2-methylphenyl)-2-(trimethylsilyl)- (9CI) (CA INDEX NAME)

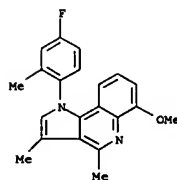
L7 ANSWER 19 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



RN 252728-56-6 CAPLUS
CN 1H-Pyrrolo[3,2-c]quinoline, 6-methoxy-3,4-dimethyl-1-(2-methylphenyl)- (9CI) (CA INDEX NAME)

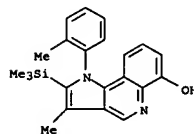


RN 252728-57-7 CAPLUS
CN 1H-Pyrrolo[3,2-c]quinoline, 1-(4-fluoro-2-methylphenyl)-6-methoxy-3,4-dimethyl- (9CI) (CA INDEX NAME)

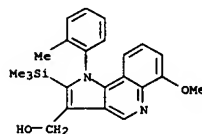


RN 252728-58-8 CAPLUS
CN Phenol, 4-(3-ethyl-6-methoxy-1H-pyrrolo[3,2-c]quinolin-1-yl)-3-methyl- (9CI) (CA INDEX NAME)

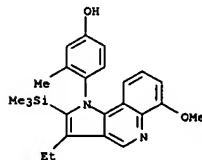
L7 ANSWER 19 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



RN 252728-72-6 CAPLUS
CN 1H-Pyrrolo[3,2-c]quinoline-3-methanol, 6-methoxy-1-(2-methylphenyl)-2-(trimethylsilyl)- (9CI) (CA INDEX NAME)

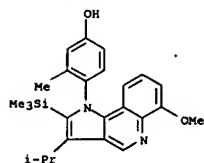


RN 252728-74-8 CAPLUS
CN Phenol, 4-(3-ethyl-6-methoxy-2-(trimethylsilyl)-1H-pyrrolo[3,2-c]quinolin-1-yl)-3-methyl- (9CI) (CA INDEX NAME)



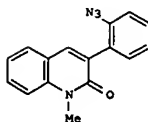
RN 252728-75-9 CAPLUS
CN Phenol, 4-[6-methoxy-3-(1-methylethyl)-2-(trimethylsilyl)-1H-pyrrolo[3,2-c]quinolin-1-yl]-3-methyl- (9CI) (CA INDEX NAME)

L7 ANSWER 19 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

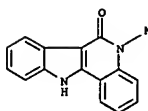


RE.CNT 20 THERE ARE 20 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 20 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN
AN 1999:621540 CAPLUS
DN 132:3493
TI A divergent approach to cryptotackieine and cryptosanguinolentine alkaloids
AU Fresneda, Pilar M.; Molina, Pedro; Delgado, S.
CS Departamento de Química Orgánica, Facultad de Química, Universidad de Murcia, Murcia, E-30071, Spain
SO Tetrahedron Letters (1999), 40(40), 7275-7278
CODEN: TETLEY; ISSN: 0040-4039
PB Elsevier Science Ltd.
DT Journal
LA English
OS CASREACT 132:3493
GI



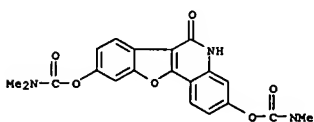
AB A seven-step synthesis of the quinone I, a common intermediate for the synthesis of the cryptotackieine and cryptosanguinolentine alkaloids, was described. I was directly converted into cryptotackieine with 40% yield by an intramol. aza-Wittig reaction with trimethylphosphine. Alternatively, heating I followed by reduction of the resulting indoloquinoline derivative provided cryptosanguinolentine.
IT 85149-47-9P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(divergent synthesis of cryptotackieine and cryptosanguinolentine alkaloids)
RN 85149-47-9 CAPLUS
CN 6H-Indolo[3,2-c]quinolin-6-one, 5,11-dihydro-5-methyl- (9CI) (CA INDEX NAME)



RE.CNT 12 THERE ARE 12 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

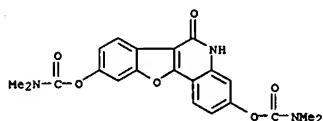
L7 ANSWER 20 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

L7 ANSWER 21 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN
AN 1999:614521 CAPLUS
DN 131:327429
TI Effect of grinding with hydroxypropyl cellulose on the dissolution and particle size of a poorly water-soluble drug
AU Yamada, Tatsuhiko; Saito, Noriyasu; Imai, Teruko; Otagiri, Masaki
CS Pharmaceutical Laboratories, Kissei Pharmaceutical Co., Ltd., Nagano, 399-8304, Japan
SO Chemical & Pharmaceutical Bulletin (1999), 47(9), 1311-1313
CODEN: CPBTAL; ISSN: 0009-2363
PB Pharmaceutical Society of Japan
DT Journal
LA English
AB A new benzofuroquinoline derivative, 3,9-bis(N,N-dimethylcarbamoyloxy)-5H-benzofuro[3,2-c]quinoline-6-one (KCA-098), shows poor oral absorption due to practical insolv. in water. In this study, a co-grinding technique employing a water-soluble polymer was used for improvement of the dissoln. rate of KCA-098. Powder x-ray diffraction patterns and IR spectra of KCA-098 showed the conversion of the drug from a crystal state to an amorphous state by grinding with a polymer such as hydroxypropyl cellulose (HPC-SL) or polyvinylpyrrolidone (PVP K30). The particle size of KCA-098 was remarkably reduced to a submicron size by grinding with HPC-SL. The co-ground mixture with HPC-SL showed a rapid dissoln. rate and maintained supersatn. for more than 1 h. On the other hand, the co-ground mixture with PVP K30 showed rapid dissoln. and supersatn. for a shorter period. The rapid dissoln. rate was obtained by the conversion of the drug particles from a crystal to amorphous state by grinding with water-soluble polymers and that a reduction in particle size to the submicron level led to the maintenance of supersatn. due to good dispersion.
IT 129794-24-7, KCA-098
RL: PEP (Physical, engineering or chemical process); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(grinding with hydroxypropyl cellulose effect on dissoln. and particle size of poorly water-soluble drug)
RN 129794-24-7 CAPLUS
CN Carbamic acid, dimethyl-, 5,6-dihydro-6-oxobenzofuro[3,2-c]quinoline-3,9-diyl ester (9CI) (CA INDEX NAME)



RE.CNT 14 THERE ARE 14 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

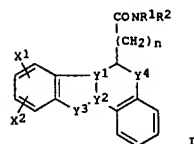
L7 ANSWER 22 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 1999:607189 CAPLUS
 DN 131:222993
 TI Characterization of urinary metabolites of a new benzofuroquinoline derivative
 IN 3,9-bis(N,N-dimethylcarbamoyloxy)-5H-benzofuro[3,2-c]quinolin-6-one (KCA-098), in dogs
 AU Yamada, Tatsuhiko; Yamamoto, A.; Fujioka, M.; Miyagi, M.; Saito, N.; Imai, I.; Otagiri, M.
 CS Central Research Laboratories, Kissei Pharmaceutical Co. Ltd., Nagano, 399, Japan
 SO Pharmazie (1999), 54(9), 672-677
 CODEN: PHARAT; ISSN: 0031-7144
 PB Gavi-Verlag Pharmazeutischer Verlag
 DT Journal
 LA English
 AB The metabolism of 3,9-bis(N,N-dimethylcarbamoyloxy)-5H-benzofuro[3,2-c]quinolin-6-one (KCA-098), an inhibitor of bone resorption and stimulator of bone formation, was examined after oral administration to dogs. Nine metabolites and the unchanged KCA-098 were isolated by extraction and HPLC from dog urine. The structures of these metabolites were characterized by LC-MS or LC-MS/MS, and/or were confirmed by comparison with corresponding authentic stds. The presumed main metabolic pathways were hydrolysis, hydroxylation, and N-demethylation of the N,N-dimethylcarbamate ester group.
 IT 129794-24-7, KCA-098
 RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
 (urinary metabolites of KCA-098 in dogs)
 RN 129794-24-7 CAPLUS
 CN Carbamic acid, dimethyl-, 5,6-dihydro-6-oxobenzofuro[3,2-c]quinoline-3,9-diyl ester (9CI) (CA INDEX NAME)



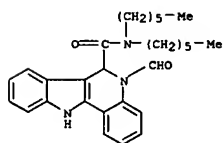
RE.CNT 19 THERE ARE 19 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 23 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 1999:375528 CAPLUS
 DN 131:31932
 TI Preparation of nitrogen-containing tetracyclic compounds
 IN Nakazato, Atsuro; Okubo, Takatoshi; Kumagai, Toshihito; Chaki, Shigeyuki; Tomisawa, Kazuyuki; Nagamine, Masashi; Gotoh, Makoto; Kondoh, Kuniaki; Yoshida, Masanori
 PA Taisho Pharmaceutical Co., Ltd., Japan; Nihon Nohyaku Co., Ltd.
 SO PCT Int. Appl., 31 pp.
 CODEN: PIXXD2
 DT Patent
 LA Japanese
 FAN.CMT 1

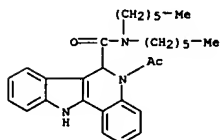
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 9928298	A1	19990610	WO 1998-JP5452	19981203
W: AU, CA, CN, KR, US RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
CA 2313054	AA	19990610	CA 1998-2313054	19981203
AU 9913510	A1	19990616	AU 1999-13510	19981203
AU 736227	B2	20010726		
JP 11228539	A2	19990824	JP 1998-344757	19981203
EP 1048651	A1	20001102	EP 1998-957146	19981203
EP 1048651	B1	20030514		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
AT 240295	E	20030515	AT 1998-957146	19981203
PT 1048651	T	20030930	PT 1998-957146	19981203
ES 2198773	T3	20040201	ES 1998-957146	19981203
US 6281355	B1	20010828	US 2000-555570	20000601
HK 1034073	A1	20050208	HK 2001-104483	20010628
PRAI JP 1997-332538	A	19971203		
WO 1998-JP5452	W	19981203		
OS MARPAT 131:31932				
GI				



L7 ANSWER 23 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)
 AB Title compds. I (Y1-Y2-Y3 = NC:N, C:CNR3; R3 = H, alkyl, nitrogen-containing alkyl; Y4 = S, SO, SO2, CH2, NR4; R4 = alkanoyl, alkyl; R1, R2 = H, alkyl, alkoxyalkyl, alkylaminoalkyl; R1R2N = cyclic amino; X1, X2 = H, alkyl, alkoxy, halo; n = 0, 1, 2) and their pharmaceutically acceptable salts were prepared. Thus, chlorination of (4-oxothiazochroman-2-yl)carboxylic acid with SOCl2 followed amidation with dihexylamine gave, after treatment with phenylhydrazine and ZnCl2, N,N-dihexyl-6,11-dihydro-5-thia-11-azabenz[a]fluorene-6-carboxamide. In an in vitro test for affinity for the mitochondrial diazepam binding inhibitor receptor (MDR), N,N-dipropyl-6,11-dihydro-5-thia-11-azabenz[a]fluorene-6-carboxamide showed IC50 of 0.368 nM.
 IT 226924-13-6P 226924-14-7P
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
 (preparation of nitrogen-containing tetracyclic compds. as therapeutic agents with high affinity for MDR receptors)
 RN 226924-13-6 CAPLUS
 CN 5H-Indolo[3,2-c]quinoline-6-carboxamide, 5-formyl-N,N-dihexyl-6,11-dihydro- (9CI) (CA INDEX NAME)



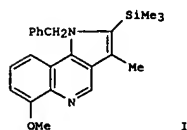
RN 226924-14-7 CAPLUS
 CN 5H-Indolo[3,2-c]quinoline-6-carboxamide, 5-acetyl-N,N-dihexyl-6,11-dihydro- (9CI) (CA INDEX NAME)



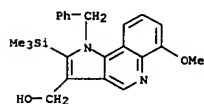
RE.CNT 9 THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD

L7 ANSWER 23 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 24 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 1999:369609 CAPLUS
 DN 131:116168
 TI Synthesis of 1,2,3-trisubstituted pyrrolo[3,2-c]quinolines via palladium-catalyzed heteroannulation with internal alkynes
 AU Kang, Seung Kyu; Park, Sang Sun; Kim, Sung Soo; Choi, Joong-Kwon; Yum, Eun
 CS Bio-Organic Science Division, Korea Research Institute of Chemical Technology, Taejeon, 305-600, S. Korea
 SO Tetrahedron Letters (1999), 40(23), 4379-4382
 CODEN: TELEAY; ISSN: 0040-4039
 PB Elsevier Science Ltd.
 DT Journal
 LA English
 GI

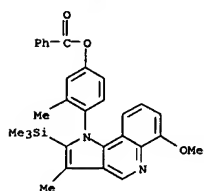


AB Various 1,2,3-trisubstituted pyrrolo[3,2-c]quinolines, e.g., I, were synthesized by palladium-catalyzed heteroannulation of 4-amino-3-iodoquinolines and internal alkynes. The 1,2,3-trisubstituted pyrrolo[3,2-c]quinolines could be further transformed by desilylation, debenzoylation, or substitution.
 IT 232922-95-1P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
 (1,2,3-trisubstituted pyrrolo[3,2-c]quinolines via palladium-catalyzed heteroannulation with internal alkynes)
 RN 232922-95-1 CAPLUS
 CN 1H-Pyrrolo[3,2-c]quinoline-3-methanol, 6-methoxy-1-(phenylmethyl)-2-(trimethylsilyl)- (9CI) (CA INDEX NAME)

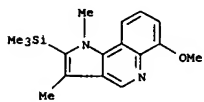


IT 232922-81-5P 232922-82-6P 232922-83-7P
 232922-84-8P 232922-85-9P 232922-86-0P
 232922-87-1P 232922-89-3P 232922-90-6P

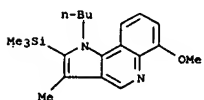
L7 ANSWER 24 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



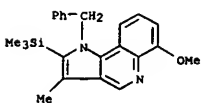
RN 232922-84-8 CAPLUS
 CN 1H-Pyrrolo[3,2-c]quinoline, 6-methoxy-1,3-dimethyl-2-(trimethylsilyl)- (9CI) (CA INDEX NAME)



RN 232922-85-9 CAPLUS
 CN 1H-Pyrrolo[3,2-c]quinoline, 1-butyl-6-methoxy-3-methyl-2-(trimethylsilyl)- (9CI) (CA INDEX NAME)

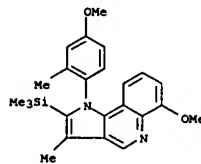


RN 232922-86-0 CAPLUS
 CN 1H-Pyrrolo[3,2-c]quinoline, 6-methoxy-3-methyl-1-(phenylmethyl)-2-(trimethylsilyl)- (9CI) (CA INDEX NAME)

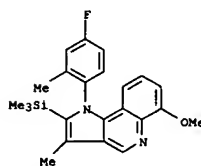


RN 232922-87-1 CAPLUS

L7 ANSWER 24 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)
 232922-91-7P 232922-92-8P 232922-93-9P
 232922-94-0P 232922-96-2P 232922-97-3P
 232922-98-4P 232922-99-5P 232923-00-1P
 232923-01-2P 232923-02-3P 232923-03-4P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (1,2,3-trisubstituted pyrrolo[3,2-c]quinolines via palladium-catalyzed heteroannulation with internal alkynes)
 RN 232922-81-5 CAPLUS
 CN 1H-Pyrrolo[3,2-c]quinoline, 6-methoxy-1-(4-methoxy-2-methylphenyl)-3-methyl-2-(trimethylsilyl)- (9CI) (CA INDEX NAME)

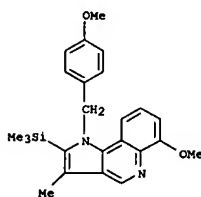


RN 232922-82-6 CAPLUS
 CN 1H-Pyrrolo[3,2-c]quinoline, 1-(4-fluoro-2-methylphenyl)-6-methoxy-3-methyl-2-(trimethylsilyl)- (9CI) (CA INDEX NAME)

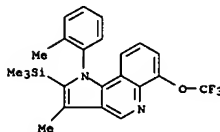


RN 232922-83-7 CAPLUS
 CN Phenol, 4-[6-methoxy-3-methyl-2-(trimethylsilyl)-1H-pyrrolo[3,2-c]quinolin-1-yl]-3-methyl-, benzoate (ester) (9CI) (CA INDEX NAME)

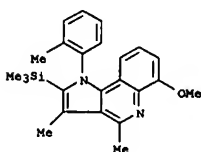
L7 ANSWER 24 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)
 CN 1H-Pyrrolo[3,2-c]quinoline, 6-methoxy-1-[(4-methoxyphenyl)methyl]-3-methyl-2-(trimethylsilyl)- (9CI) (CA INDEX NAME)



RN 232922-89-3 CAPLUS
 CN 1H-Pyrrolo[3,2-c]quinoline, 3-methyl-1-(2-methylphenyl)-6-(trifluoromethoxy)-2-(trimethylsilyl)- (9CI) (CA INDEX NAME)

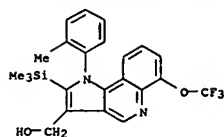


RN 232922-90-6 CAPLUS
 CN 1H-Pyrrolo[3,2-c]quinoline, 6-methoxy-3,4-dimethyl-1-(2-methylphenyl)-2-(trimethylsilyl)- (9CI) (CA INDEX NAME)

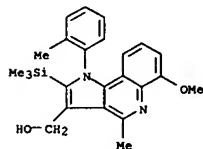


RN 232922-91-7 CAPLUS
 CN 1H-Pyrrolo[3,2-c]quinoline-3-methanol, 1-(2-methylphenyl)-6-(trifluoromethoxy)-2-(trimethylsilyl)- (9CI) (CA INDEX NAME)

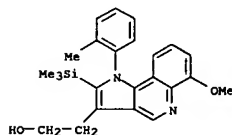
L7 ANSWER 24 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



RN 232922-92-8 CAPLUS
 CN 1H-Pyrrolo[3,2-c]quinoline-3-methanol, 6-methoxy-4-methyl-1-(2-methylphenyl)-2-(trimethylsilyl)- (9CI) (CA INDEX NAME)



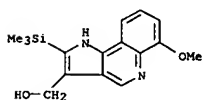
RN 232922-93-9 CAPLUS
 CN 1H-Pyrrolo[3,2-c]quinoline-3-ethanol, 6-methoxy-1-(2-methylphenyl)-2-(trimethylsilyl)- (9CI) (CA INDEX NAME)



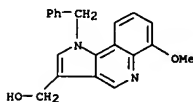
RN 232922-94-0 CAPLUS
 CN 1H-Pyrrolo[3,2-c]quinoline-3-methanol, 6-methoxy-1-(4-methoxy-2-methylphenyl)-2-(trimethylsilyl)- (9CI) (CA INDEX NAME)

L7 ANSWER 24 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

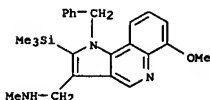
RN 232922-99-5 CAPLUS
 CN 1H-Pyrrolo[3,2-c]quinoline-3-methanol, 6-methoxy-2-(trimethylsilyl)- (9CI)
 (CA INDEX NAME)



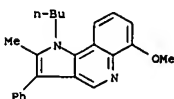
RN 232923-00-1 CAPLUS
 CN 1H-Pyrrolo[3,2-c]quinoline-3-methanol, 6-methoxy-1-(phenylmethyl)- (9CI)
 (CA INDEX NAME)



RN 232923-01-2 CAPLUS
 CN 1H-Pyrrolo[3,2-c]quinoline-3-methanamine, 6-methoxy-N-methyl-1-(phenylmethyl)-2-(trimethylsilyl)- (9CI) (CA INDEX NAME)

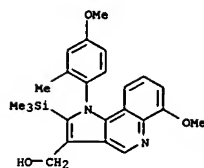


RN 232923-02-3 CAPLUS
 CN 1H-Pyrrolo[3,2-c]quinoline, 1-butyl-6-methoxy-2-methyl-3-phenyl- (9CI)
 (CA INDEX NAME)

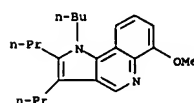


RN 232923-03-4 CAPLUS
 CN 1H-Pyrrolo[3,2-c]quinoline-2-methanol, 1-butyl-6-methoxy-3-phenyl- (9CI)

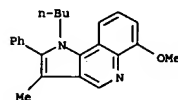
L7 ANSWER 24 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



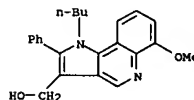
RN 232922-96-2 CAPLUS
 CN 1H-Pyrrolo[3,2-c]quinoline, 1-butyl-6-methoxy-2,3-dipropyl- (9CI) (CA INDEX NAME)



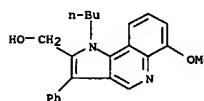
RN 232922-97-3 CAPLUS
 CN 1H-Pyrrolo[3,2-c]quinoline, 1-butyl-6-methoxy-3-methyl-2-phenyl- (9CI)
 (CA INDEX NAME)



RN 232922-98-4 CAPLUS
 CN 1H-Pyrrolo[3,2-c]quinoline-3-methanol, 1-butyl-6-methoxy-2-phenyl- (9CI)
 (CA INDEX NAME)

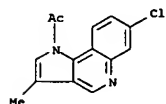


L7 ANSWER 24 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



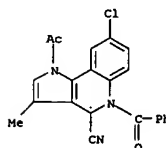
RE.CNT 24 THERE ARE 24 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 25 OF 273 CAPLUS COPYRIGHT 2005 ACS ON STN
 AN 1999:348898 CAPLUS
 DN 131:124938
 TI Pyrrolo[3,2-c]quinoline derivatives: a new class of kynurenine-3-hydroxylase inhibitors
 AU Heidemeyergher, Franco; Pevarello, Paolo; Pillan, Antonio; Pinciroli, Vittorio; Torre, Arturo Della; Speciale, Carmela; Marconi, Marina; Cini, Massimo; Toma, Salvatore; Greco, Felicità; Varasi, Mario
 CS Pharmacia and Upjohn, Chemistry Department, Milan, I-20014, Italy
 SO Farmaco (1999), 54(3), 152-160
 CODEN: FRMCE8; ISSN: 0014-827X
 PB Elsevier Science S.A.
 DT Journal
 LA English
 AB A series of pyrrolo[3,2-c]quinoline derivs. were synthesized and evaluated as inhibitors of selected enzymes of the kynurenine pathway. 7-Chloro-3-methyl-1H-pyrrolo[3,2-c]quinoline-4-carboxylic acid (I) was found to be a relatively potent and selective inhibitor of kynurenine-3-hydroxylase (KYN-3-OHase). A mol. modeling study showed a good superimposition of I with PNU-156561 and kynurenine the natural substrate of KYN-3-OHase.
 IT 202974-67-2P 202974-68-3P 202974-69-4P
 202974-70-7P 202974-71-8P 202974-72-9P
 202974-73-0P 202974-74-1P 202974-75-2P
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PRP (Properties); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
 (preparation of pyrrolo[3,2-c]quinoline derivs. as kynurenine-3-hydroxylase inhibitors)
 RN 202974-67-2 CAPLUS
 CN 1H-Pyrrolo[3,2-c]quinoline, 1-acetyl-7-chloro-3-methyl- (9CI) (CA INDEX NAME)

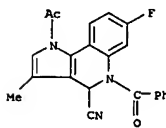


RN 202974-68-3 CAPLUS
 CN 1H-Pyrrolo[3,2-c]quinoline, 1-acetyl-8-chloro-3-methyl- (9CI) (CA INDEX NAME)

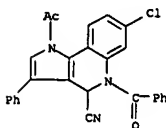
L7 ANSWER 25 OF 273 CAPLUS COPYRIGHT 2005 ACS ON STN (Continued)
 RN 202974-72-9 CAPLUS
 CN 1H-Pyrrolo[3,2-c]quinoline-4-carbonitrile, 1-acetyl-5-benzoyl-8-chloro-4,5-dihydro-3-methyl- (9CI) (CA INDEX NAME)



RN 202974-73-0 CAPLUS
 CN 1H-Pyrrolo[3,2-c]quinoline-4-carbonitrile, 1-acetyl-5-benzoyl-7-fluoro-4,5-dihydro-3-methyl- (9CI) (CA INDEX NAME)

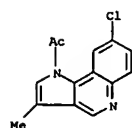


RN 202974-74-1 CAPLUS
 CN 1H-Pyrrolo[3,2-c]quinoline-4-carbonitrile, 1-acetyl-5-benzoyl-7-chloro-4,5-dihydro-3-phenyl- (9CI) (CA INDEX NAME)

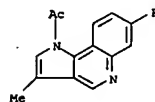


RN 202974-75-2 CAPLUS
 CN 1H-Pyrrolo[3,2-c]quinoline-4-carboxylic acid, 7-chloro-3-methyl- (9CI) (CA INDEX NAME)

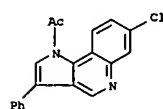
L7 ANSWER 25 OF 273 CAPLUS COPYRIGHT 2005 ACS ON STN (Continued)



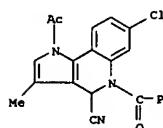
RN 202974-69-4 CAPLUS
 CN 1H-Pyrrolo[3,2-c]quinoline, 1-acetyl-7-fluoro-3-methyl- (9CI) (CA INDEX NAME)



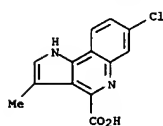
RN 202974-70-7 CAPLUS
 CN 1H-Pyrrolo[3,2-c]quinoline, 1-acetyl-7-chloro-3-phenyl- (9CI) (CA INDEX NAME)



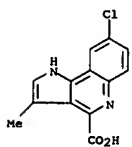
RN 202974-71-8 CAPLUS
 CN 1H-Pyrrolo[3,2-c]quinoline-4-carbonitrile, 1-acetyl-5-benzoyl-7-chloro-4,5-dihydro-3-methyl- (9CI) (CA INDEX NAME)



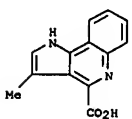
L7 ANSWER 25 OF 273 CAPLUS COPYRIGHT 2005 ACS ON STN (Continued)



IT 202974-76-3P 202974-77-4P 202974-78-5P
 202974-79-6P 202974-81-0P
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PRP (Properties); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
 (preparation of pyrrolo[3,2-c]quinoline derivs. as kynurenine-3-hydroxylase inhibitors)
 RN 202974-76-3 CAPLUS
 CN 1H-Pyrrolo[3,2-c]quinoline-4-carboxylic acid, 8-chloro-3-methyl- (9CI) (CA INDEX NAME)

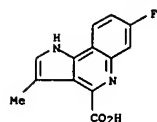


RN 202974-77-4 CAPLUS
 CN 1H-Pyrrolo[3,2-c]quinoline-4-carboxylic acid, 3-methyl- (9CI) (CA INDEX NAME)

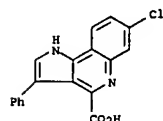


RN 202974-78-5 CAPLUS
 CN 1H-Pyrrolo[3,2-c]quinoline-4-carboxylic acid, 7-fluoro-3-methyl- (9CI) (CA INDEX NAME)

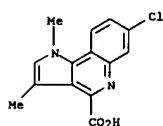
L7 ANSWER 25 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



RN 202974-79-6 CAPLUS
CN 1H-Pyrrolo[3,2-c]quinoline-4-carboxylic acid, 7-chloro-3-phenyl- (9CI)
(CA INDEX NAME)



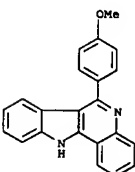
RN 202974-81-0 CAPLUS
CN 1H-Pyrrolo[3,2-c]quinoline-4-carboxylic acid, 7-chloro-1,3-dimethyl- (9CI)
(CA INDEX NAME)



IT 68499-93-4 68499-97-8 234444-68-9
234444-69-0
RL: RCT (Reactant); RACT (Reactant or reagent)
(preparation of pyrrolo[3,2-c]quinoline derivs. as
kynurenine-3-hydroxylase
inhibitors)
RN 68499-93-4 CAPLUS
CN 1H-Pyrrolo[3,2-c]quinoline, 7-chloro-3-methyl- (9CI) (CA INDEX NAME)

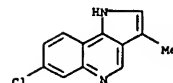
L7 ANSWER 26 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN

AN 1999:300305 CAPLUS
DN 131:73589
TI 6-Aryl-11H-indolo[3,2-c]quinolines through the palladium-catalyzed
carbonylative cyclization of
2-[(2-aminophenyl)ethynyl]trifluoroacetanilide
with aryl iodides
AU Cacchi, Sandro; Fabrizi, Giancarlo; Pace, Paola; Marinelli, Fabio
CS Dipartimento Studi Chimica Tecnologia Sostanze Biologicamente Attive,
Universita "La Sapienza", Rome, I-00185, Italy
SO Synlett (1999), (5), 620-622
CODEN: SYNLES; ISSN: 0936-5214
PB Georg Thieme Verlag
DT Journal
LA English
OS CASREACT 131:73589
AB 6-Aryl-11H-indolo[3,2-c]quinolines are prepared through a straightforward
Pd-catalyzed carbonylative cyclization of 2-H2NCSH4C.tplbond.CC6H4-2-
NHCOCF3 with aryl iodides followed by the cyclization of the resultant
3-acylindoles. The reaction is best carried out as a 1-pot process.
IT 228575-99-3P 228576-00-9P 228576-01-0P
228576-02-1P 228576-03-2P 228576-04-3P
228576-05-4P 228576-06-5P 228576-07-6P
228576-08-7P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of indoloquinolines by carbonylative cyclization of
[(aminophenyl)ethynyl]fluoroacetanilide with aryl iodides)
RN 228575-99-3 CAPLUS
CN 11H-Indolo[3,2-c]quinoline, 6-(4-methoxyphenyl)- (9CI) (CA INDEX NAME)

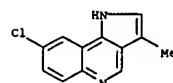


RN 228576-00-9 CAPLUS
CN Ethanone, 1-[4-(11H-indolo[3,2-c]quinolin-6-yl)phenyl]- (9CI) (CA INDEX NAME)

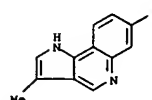
L7 ANSWER 25 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



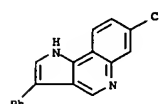
RN 68499-97-8 CAPLUS
CN 1H-Pyrrolo[3,2-c]quinoline, 8-chloro-3-methyl- (9CI) (CA INDEX NAME)



RN 234444-68-9 CAPLUS
CN 1H-Pyrrolo[3,2-c]quinoline, 7-fluoro-3-methyl- (9CI) (CA INDEX NAME)

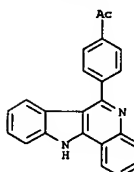


RN 234444-69-0 CAPLUS
CN 1H-Pyrrolo[3,2-c]quinoline, 7-chloro-3-phenyl- (9CI) (CA INDEX NAME)

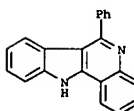


RE.CNT 21 THERE ARE 21 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

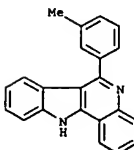
L7 ANSWER 26 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



RN 228576-01-0 CAPLUS
CN 11H-Indolo[3,2-c]quinoline, 6-phenyl- (9CI) (CA INDEX NAME)

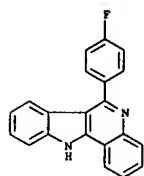


RN 228576-02-1 CAPLUS
CN 11H-Indolo[3,2-c]quinoline, 6-(3-methylphenyl)- (9CI) (CA INDEX NAME)

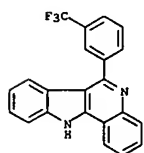


RN 228576-03-2 CAPLUS
CN 11H-Indolo[3,2-c]quinoline, 6-(4-fluorophenyl)- (9CI) (CA INDEX NAME)

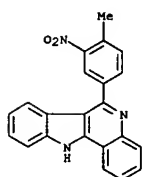
L7 ANSWER 26 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



RN 228576-04-3 CAPLUS
CN 11H-Indolo[3,2-c]quinoline, 6-[3-(trifluoromethyl)phenyl]- (9CI) (CA INDEX NAME)



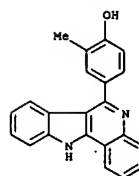
RN 228576-05-4 CAPLUS
CN 11H-Indolo[3,2-c]quinoline, 6-(4-methyl-3-nitrophenyl)- (9CI) (CA INDEX NAME)



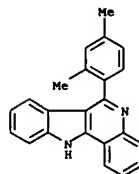
RN 228576-06-5 CAPLUS
CN Phenol, 4-[(11H-indolo[3,2-c]quinolin-6-yl)-2-methyl- (9CI) (CA INDEX NAME)

L7 ANSWER 26 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

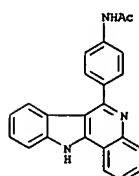
L7 ANSWER 26 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



RN 228576-07-6 CAPLUS
CN 11H-Indolo[3,2-c]quinoline, 6-(2,4-dimethylphenyl)- (9CI) (CA INDEX NAME)



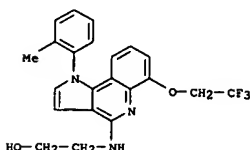
RN 228576-08-7 CAPLUS
CN Acetamide, N-[4-[(11H-indolo[3,2-c]quinolin-6-yl)phenyl]- (9CI) (CA INDEX NAME)



RE.CNT 12 THERE ARE 12 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

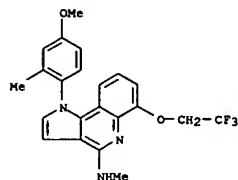
L7 ANSWER 27 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN

AN 1999:287251 CAPLUS
DN 131:97339
TI Anti-ulcer activity of newly synthesized acylquinoline derivatives
AU Cheon, Hye Gyeong; Kim, Hyun Jung; Mo, Hye Kyoung; Shin, Enjoo; Lee, Yeonhee
CS Pharmaceutical Screening Center, Korea Research Institute of Chemical Technology, Taejeon, 305-606, S. Korea
SO Archives of Pharmacal Research (1999), 22(2), 137-142
CODEN: APHRDQ; ISSN: 0253-6269
PB Pharmaceutical Society of Korea
DT Journal
LA English
AB Anti-ulcer activity of newly synthesized acylquinoline derivs. was investigated. For the in vitro screening, the effects of the compds. on gastric H⁺/K⁺ ATPase isolated from hog and rabbit were examined. Among them, AU-090, AU-091, AU-254, AU-413 and AU-466 exhibited good in vitro activity on both enzymes. To correlate the in vitro activity with in vivo action, the effects of the compds. on the basal gastric acid secretion were studied. Some derivs. showed considerable anti-secretory activities, and AU-413 was selected for further studies. AU-413 protected gastric damage induced by either ethanol or NaOH dose dependently when given orally. ED50 values of 12 mg/kg, p.o. (ethanol) and 41 mg/kg, p.o. (NaOH) were obtained. In addition, histamine-stimulated gastric secretion was reduced upon AU-413 administration. Taken together, newly synthesized acylquinoline derivs., especially AU-413, is worthy of further investigation to be developed as an anti-ulcer agent.
IT 220853-85-0, AU 413 220854-08-0, AU 466 230648-14-3, AU 085 230648-15-4, AU 086 230648-16-5, AU 090 230648-17-6, AU 091 230648-18-7, AU 254 230648-19-8, AU 291 230648-20-1, AU 293
RL: BNC (Biological activity or effector, except adverse); BSU (Biological activity, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (anti-ulcer activity of newly synthesized acylquinoline derivs.)
RN 220853-85-0 CAPLUS
CN Ethanol, 2-[(1-(2-methylphenyl)-6-(2,2,2-trifluoroethoxy)-1H-pyrrolo[3,2-c]quinolin-4-yl)amino]- (9CI) (CA INDEX NAME)

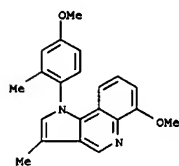


RN 220854-08-0 CAPLUS

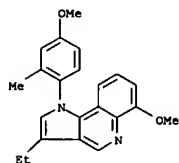
L7 ANSWER 27 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)
 CN 1H-Pyrrolo[3,2-c]quinolin-4-amine,
 1-(4-methoxy-2-methylphenyl)-N-methyl-6-
 (2,2,2-trifluoroethoxy)- (9CI) (CA INDEX NAME)



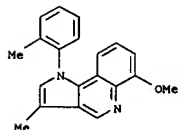
RN 230648-14-3 CAPLUS
 CN 1H-Pyrrolo[3,2-c]quinoline, 6-methoxy-1-(4-methoxy-2-methylphenyl)-3-methyl- (9CI) (CA INDEX NAME)



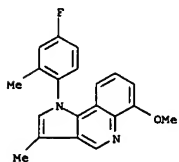
RN 230648-15-4 CAPLUS
 CN 1H-Pyrrolo[3,2-c]quinoline,
 3-ethyl-6-methoxy-1-(4-methoxy-2-methylphenyl)-
 (9CI) (CA INDEX NAME)



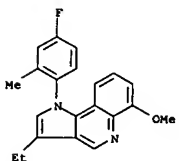
L7 ANSWER 27 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



RN 230648-19-8 CAPLUS
 CN 1H-Pyrrolo[3,2-c]quinoline,
 1-(4-fluoro-2-methylphenyl)-6-methoxy-3-methyl-
 (9CI) (CA INDEX NAME)



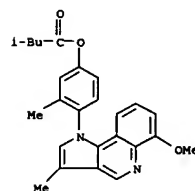
RN 230648-20-1 CAPLUS
 CN 1H-Pyrrolo[3,2-c]quinoline,
 3-ethyl-1-(4-fluoro-2-methylphenyl)-6-methoxy-
 (9CI) (CA INDEX NAME)



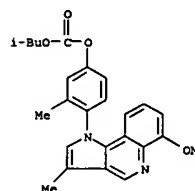
RE.CNT 22 THERE ARE 22 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 27 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

RN 230648-16-5 CAPLUS
 CN Butanoic acid, 3-methyl-,
 4-(6-methoxy-3-methyl-1H-pyrrolo[3,2-c]quinolin-1-yl)-3-methylphenyl ester (9CI) (CA INDEX NAME)



RN 230648-17-6 CAPLUS
 CN Carbonic acid, 4-(6-methoxy-3-methyl-1H-pyrrolo[3,2-c]quinolin-1-yl)-3-methylphenyl 2-methylpropyl ester (9CI) (CA INDEX NAME)



RN 230648-18-7 CAPLUS
 CN 1H-Pyrrolo[3,2-c]quinoline, 6-methoxy-3-methyl-1-(2-methylphenyl)- (9CI)
 (CA INDEX NAME)

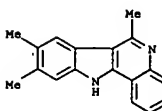


L7 ANSWER 28 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN

RN 1999:281415 CAPLUS
 DN 131:73618
 TI Novel DNA Intercalators Based on the Pyridazino[1',6':1,2]pyrido[4,3-b]indol-5-inium System
 AU Molina, Andres; Vaquero, Juan J.; Garcia-Navio, Jose L.; Alvarez-Builla, Julio; de Pascual-Teresa, Beatriz; Gago, Federico; Rodrigo, Maria M.
 CS Departamento de Quimica Organica, Universidad de Alcala, Alcala de Henares
 Madrid, 28871, Spain
 SO Journal of Organic Chemistry (1999), 64(11), 3907-3915
 CODEN: JOCEAH; ISSN: 0022-3263
 PB American Chemical Society
 DT Journal
 LA English
 OS CASREACT 131:73618
 GI

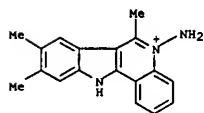
* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB A new class of DNA intercalators I (prepared as their mesitylsulfonate salts) (R = H, Me; R1 = R2 = H, Me; R3 = Me, Et) based on the pyridazino[1',6':1,2]pyrido[4,3-b]indol-5-inium system in which the cationic nature of the chromophore is provided by a bridgehead quaternary nitrogen has been obtained. Cations such as I along with the mesitylsulfonate salts of cations such as indolo[3,2-c]pyridazino[1,6-a]quinolin-5-inium ion II, dibenz[*f,h*]indolo[3',2':3,4]pyrido[1,2-b]cinnolin-10-inium ion III, and acenaphtho[1',2':3',4']pyridazino[1',6':1,2]pyrido[4,3-b]indol-8-inium ions IV (R4 = H, Me) were prepared by the Westphal reaction of N-amino carbolinium derivs. with various 1,2-dicarbonyl compds. When these tetra-, penta-, and heptacyclic heteroarom. nuclei were evaluated as DNA intercalators using UV-vis spectroscopy, viscometric detns., and unwinding angle detns., we found that only I behaved as DNA intercalators. Mol. modeling studies allowed the preferred orientation of the intercalating chromophore within a CpG intercalation site to be explored and will provide help in the rational design of novel bis-intercalators based on these chromophores.
 IT 149429-22-1P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
 (intermediate in the preparation and lack of DNA binding and uncoiling activity of an indolopyridazinoquinolinium salt)
 RN 149429-22-1 CAPLUS
 CN 11H-Indolo[3,2-c]quinoline, 6,8,9-trimethyl- (9CI) (CA INDEX NAME)

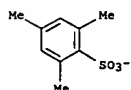


IT 229185-31-3P

L7 ANSWER 28 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
 (Reactant or reagent)
 (prepn. and lack of DNA binding and uncoiling activity of an
 indolopyridazinoquinolinium salt)
 RN 229185-31-3 CAPLUS
 CN 11H-Indolo[3,2-c]quinolinium, 5-amino-6,8,9-trimethyl-, salt with
 2,4,6-trimethylbenzenesulfonic acid (1:1) (9CI) (CA INDEX NAME)
 CM 1
 CRN 229185-30-2
 CMF C18 H18 N3

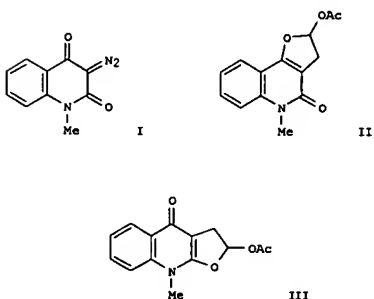


CM 2
 CRN 46149-61-5
 CMF C9 H11 O3 S



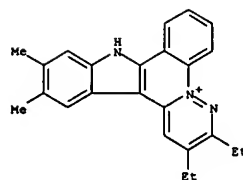
IT 229185-33-5P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation and lack of DNA binding and uncoiling activity of an
 indolopyridazinoquinolinium salt)
 RN 229185-33-5 CAPLUS
 CN 10H-Indolo[3,2-c]pyridazino[1,6-a]quinolin-5-ium, 2,3-diethyl-12,13-
 dimethyl-, salt with 2,4,6-trimethylbenzenesulfonic acid (1:1) (9CI) (CA
 INDEX NAME)
 CM 1
 CRN 229185-32-4
 CMF C24 H24 N3

L7 ANSWER 29 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 1995:261316 CAPLUS
 DN 130:325277
 TI Rhodium-mediated dipolar cycloaddition of diazoquinolinediones
 AU Pirrung, Michael C.; Blume, Florian
 CS Department of Chemistry Levine Science Research Center, Duke University,
 Durham, NC, 27708-0317, USA
 SO Journal of Organic Chemistry (1999), 64(10), 3642-3649
 CODEN: JOCEAH; ISSN: 0022-3263
 PB American Chemical Society
 DT Journal
 LA English
 OS CASREACT 130:325277
 GI

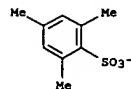


AB As an entry to furoquinoline structures of natural origin, the
 rhodium-mediated dipolar cycloaddn. of diazoquinolinediones, e.g., I,
 with
 the alkenes and alkynes, e.g., vinyl acetate, has been examined. Because of
 the unsym. nature of the diazo compds., both linear and angular furoquinoline
 products, e.g., II and III, resp., are possible. For the most part, a
 mixture of regioisomers is generated in moderate to good yields, though
 in a few cases dominant products are obtained in high yields. The products
 can be further converted to naturally occurring alkaloids such as
 isodictamnins. A novel observation in this work is that catalytic
 quantities of acid enhance the yield and regiochem. control in the
 cycloaddn.
 IT 223668-17-5P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
 (Reactant or reagent)
 (preparation and rhodium-mediated dipolar cycloaddn. of
 diazoquinolinediones)
 RN 223668-17-5 CAPLUS

L7 ANSWER 28 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

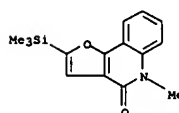


CM 2
 CRN 46149-61-5
 CMF C9 H11 O3 S

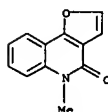


RE.CNT 71 THERE ARE 71 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

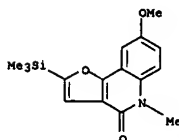
L7 ANSWER 29 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)
 CN Furo[3,2-c]quinolin-4(5H)-one, 5-methyl-2-(trimethylsilyl)- (9CI) (CA
 INDEX NAME)



IT 67735-57-3P, Pseudoisodictamnins 223668-26-6P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation and rhodium-mediated dipolar cycloaddn. of
 diazoquinolinediones)
 RN 67735-57-3 CAPLUS
 CN Furo[3,2-c]quinolin-4(5H)-one, 5-methyl- (6CI, 9CI) (CA INDEX NAME)

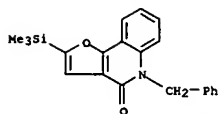


RN 223668-26-6 CAPLUS
 CN Furo[3,2-c]quinolin-4(5H)-one, 8-methoxy-5-methyl-2-(trimethylsilyl)-
 (9CI) (CA INDEX NAME)



RN 223668-29-9 CAPLUS
 CN Furo[3,2-c]quinolin-4(5H)-one, 5-(phenylmethyl)-2-(trimethylsilyl)- (9CI)
 (CA INDEX NAME)

L7 ANSWER 29 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

RE.CNT 43 THERE ARE 43 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 30 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN

AN 1999:139845 CAPLUS

DN 130:196642

TI Preparation of haloalkoxypyrrolo[3,2-c]quinolines as gastric acid

secretion inhibitors.

IN Choi, Joong-kwon; Kim, Sung-soo; Yum, Eul-kyun; Kang, Seung-kyu; Yoo,

Yea-kang; Cheon, Hye-gyeong; Kim, Hye-jung

PA Korea Research Institute of Chemical Technology, S. Korea

SO PCT Int. Appl., 100 pp.

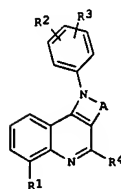
CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 9909029	A1	19990225	WO 1998-KR1	19980108
<--				
W: CA, JP				
RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT,				
SE EP 966466	A1	19991229	EP 1998-901111	19980108
<--				
EP 966466	B1	20020703		
R: DE, FR, GB, IT				
JP 2000504352	T2	20000411	JP 1999-513040	19980108
<--				
JP 3215850	B2	20011009		
CA 2268166	C	20030506	CA 1998-2268166	19980108
<--				
CA 2268166	AA	19990225		
US 6011044	A	20000104	US 1998-130954	19980807
<--				
PRAI KR 1997-38512	A	19970813		
WO 1998-KR1	W	19980108		
OS MARPAT 130:196642				
GI				



AB Title compds. (I; R1 = haloalkoxy including trifluoromethoxy,

L7 ANSWER 30 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)
 difluoromethoxy, trifluoroethoxy; R2, R3 = H, halo, OH, PhCH2O, alkyl,
 alkoxy; A = CH2CH2, CH=CH; R4 = H, halo, amino, alkylamino, NH(CH2)nOH; n
 = 1-6), were prepd. Thus, 1-(2-methylphenyl)-4-chloro-6-
 β,β,β-trifluoroethoxy-2,3-dihydropyrrolo[3,2-c]quinoline
 was heated with ethanolamine to give 92% 1-(2-methylphenyl)-4-[(2-
 hydroxyethyl)amino]-6-β,β,β-trifluoroethoxy-2,3-
 dihydropyrrolo[3,2-c]quinoline (II). II.HCl drug formulations are given.
 Several I were superior to SK&F 96067 as gastric acid secretion
 inhibitors.

IT 220853-48-5P 220853-49-6P 220853-50-9P
 220853-51-0P 220853-62-3P 220853-63-4P
 220853-64-5P 220853-72-5P 220853-73-6P
 220853-83-8P 220853-85-0P 220853-87-2P
 220853-90-7P 220854-01-3P 220854-02-4P
 220854-08-0P 220854-11-5P 220854-12-6P
 220854-15-9P 220854-16-0P

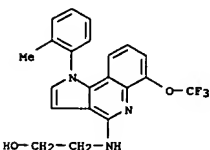
RL: BAC (Biological activity or effector, except adverse); BSU

(Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use);
 BIOL (Biological study); PREP (Preparation); USES (Uses)
 (preparation of haloalkoxypyrrolo[3,2-c]quinolines as gastric acid
 secretion inhibitors)

RN 220853-48-5 CAPLUS
 CN 1H-Pyrrolo[3,2-c]quinolin-4-amine, N-methyl-1-(2-methylphenyl)-6-
 (trifluoromethoxy)- (9CI) (CA INDEX NAME)

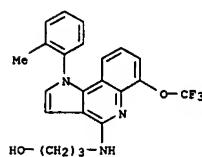


RN 220853-49-6 CAPLUS
 CN Ethanol, 2-[[1-(2-methylphenyl)-6-(trifluoromethoxy)-1H-pyrrolo[3,2-
 c]quinolin-4-yl]amino]- (9CI) (CA INDEX NAME)

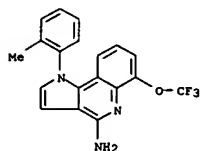


RN 220853-50-9 CAPLUS

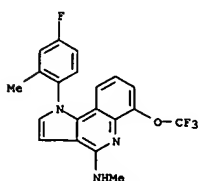
L7 ANSWER 30 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)
 CN 1-Propanol, 3-[[1-(2-methylphenyl)-6-(trifluoromethoxy)-1H-pyrrolo[3,2-
 c]quinolin-4-yl]amino]- (9CI) (CA INDEX NAME)



RN 220853-51-0 CAPLUS
 CN 1H-Pyrrolo[3,2-c]quinolin-4-amine,
 1-(2-methylphenyl)-6-(trifluoromethoxy)-
 (9CI) (CA INDEX NAME)

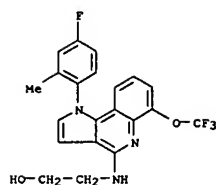


RN 220853-62-3 CAPLUS
 CN 1H-Pyrrolo[3,2-c]quinolin-4-amine,
 1-(4-fluoro-2-methylphenyl)-N-methyl-6-
 (trifluoromethoxy)- (9CI) (CA INDEX NAME)

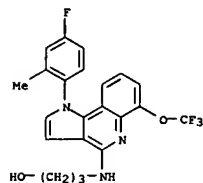


RN 220853-63-4 CAPLUS
 CN Ethanol, 2-[[1-(4-fluoro-2-methylphenyl)-6-(trifluoromethoxy)-1H-
 pyrrolo[3,2-c]quinolin-4-yl]amino]- (9CI) (CA INDEX NAME)

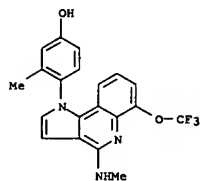
L7 ANSWER 30 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



RN 220853-64-5 CAPLUS
 CN 1-Propanol, 3-[[1-(4-fluoro-2-methylphenyl)-6-(trifluoromethoxy)-1H-pyrrolo[3,2-c]quinolin-4-yl]amino]- (9CI) (CA INDEX NAME)

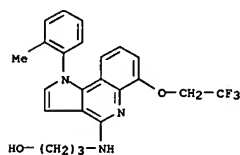


RN 220853-72-5 CAPLUS
 CN Phenol, 3-methyl-4-[[1-(2-methylphenyl)-6-(2,2,2-trifluoroethoxy)-1H-pyrrolo[3,2-c]quinolin-4-yl]amino]- (9CI) (CA INDEX NAME)

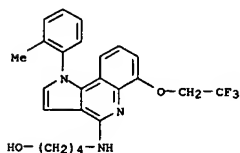


L7 ANSWER 30 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

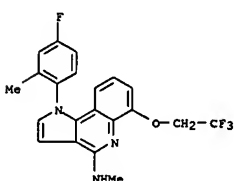
RN 220853-87-2 CAPLUS
 CN 1-Propanol, 3-[[1-(2-methylphenyl)-6-(2,2,2-trifluoroethoxy)-1H-pyrrolo[3,2-c]quinolin-4-yl]amino]- (9CI) (CA INDEX NAME)



RN 220853-90-7 CAPLUS
 CN 1-Butanol, 4-[[1-(2-methylphenyl)-6-(2,2,2-trifluoroethoxy)-1H-pyrrolo[3,2-c]quinolin-4-yl]amino]- (9CI) (CA INDEX NAME)



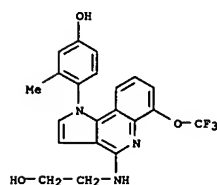
RN 220854-01-3 CAPLUS
 CN 1H-Pyrrolo[3,2-c]quinolin-4-amine, 1-(4-fluoro-2-methylphenyl)-N-methyl-6-(2,2,2-trifluoroethoxy)- (9CI) (CA INDEX NAME)



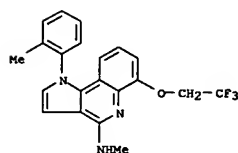
RN 220854-02-4 CAPLUS

L7 ANSWER 30 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

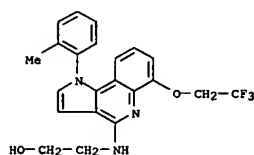
RN 220853-73-6 CAPLUS
 CN Phenol, 4-[[4-[(2-hydroxyethyl)amino]-6-(trifluoromethoxy)-1H-pyrrolo[3,2-c]quinolin-1-yl]-3-methyl]- (9CI) (CA INDEX NAME)



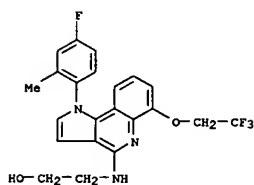
RN 220853-83-8 CAPLUS
 CN 1H-Pyrrolo[3,2-c]quinolin-4-amine, N-methyl-1-(2-methylphenyl)-6-(2,2,2-trifluoroethoxy)- (9CI) (CA INDEX NAME)



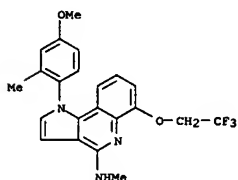
RN 220853-85-0 CAPLUS
 CN Ethanol, 2-[[1-(2-methylphenyl)-6-(2,2,2-trifluoroethoxy)-1H-pyrrolo[3,2-c]quinolin-4-yl]amino]- (9CI) (CA INDEX NAME)



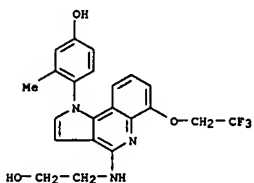
L7 ANSWER 30 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)
 CN Ethanol, 2-[[1-(4-fluoro-2-methylphenyl)-6-(2,2,2-trifluoroethoxy)-1H-pyrrolo[3,2-c]quinolin-4-yl]amino]- (9CI) (CA INDEX NAME)



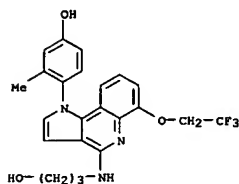
RN 220854-08-0 CAPLUS
 CN 1H-Pyrrolo[3,2-c]quinolin-4-amine, 1-(4-methoxy-2-methylphenyl)-N-methyl-6-(2,2,2-trifluoroethoxy)- (9CI) (CA INDEX NAME)



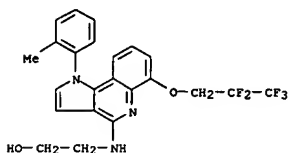
RN 220854-11-5 CAPLUS
 CN Phenol, 4-[[4-[(2-hydroxyethyl)amino]-6-(2,2,2-trifluoroethoxy)-1H-pyrrolo[3,2-c]quinolin-1-yl]-3-methyl]- (9CI) (CA INDEX NAME)



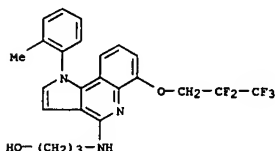
L7 ANSWER 30 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)
 RN 220854-12-6 CAPLUS
 CN Phenol, 4-[4-[(3-hydroxypropyl)amino]-6-(2,2,2-trifluoroethoxy)-1H-pyrrolo[3,2-c]quinolin-1-yl]-3-methyl- (9CI) (CA INDEX NAME)



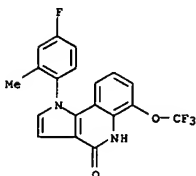
RN 220854-15-9 CAPLUS
 CN Ethanol, 2-[[1-(2-methylphenyl)-6-(2,2,3,3,3-pentafluoropropoxy)-1H-pyrrolo[3,2-c]quinolin-4-yl]amino]- (9CI) (CA INDEX NAME)



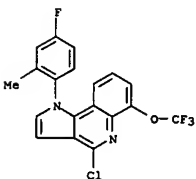
RN 220854-16-0 CAPLUS
 CN 1-Propanol, 3-[[1-(2-methylphenyl)-6-(2,2,3,3,3-pentafluoropropoxy)-1H-pyrrolo[3,2-c]quinolin-4-yl]amino]- (9CI) (CA INDEX NAME)



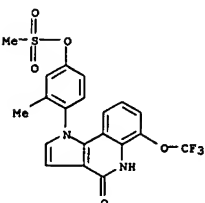
L7 ANSWER 30 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



RN 220854-34-2 CAPLUS
 CN 1H-Pyrrolo[3,2-c]quinoline, 4-chloro-1-(4-fluoro-2-methylphenyl)-6-(trifluoromethoxy)- (9CI) (CA INDEX NAME)



RN 220854-41-1 CAPLUS
 CN 4H-Pyrrolo[3,2-c]quinolin-4-one, 1,5-dihydro-1-(2-methyl-4-[(methylsulfonyl)oxy]phenyl)-6-(trifluoromethoxy)- (9CI) (CA INDEX NAME)



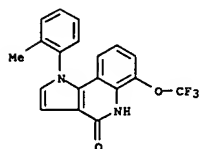
RN 220854-42-2 CAPLUS
 CN Phenol, 4-[4-chloro-6-(trifluoromethoxy)-1H-pyrrolo[3,2-c]quinolin-1-yl]-3-

L7 ANSWER 30 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

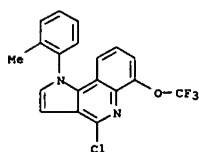
IT 220854-22-8P 220854-23-9P 220854-32-0P
 220854-34-2P 220854-41-1P 220854-42-2P
 220854-46-6P 220854-47-7P 220854-53-5P
 220854-54-6P 220854-62-6P 220854-63-7P
 220854-72-8P 220854-73-9P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
 (preparation of haloalkoxypyrrolo[3,2-c]quinolines as gastric acid secretion inhibitors)

RN 220854-22-8 CAPLUS
 CN 4H-Pyrrolo[3,2-c]quinolin-4-one, 1,5-dihydro-1-(2-methylphenyl)-6-(trifluoromethoxy)- (9CI) (CA INDEX NAME)

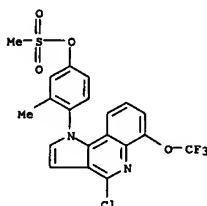


RN 220854-23-9 CAPLUS
 CN 1H-Pyrrolo[3,2-c]quinoline, 4-chloro-1-(2-methylphenyl)-6-(trifluoromethoxy)- (9CI) (CA INDEX NAME)

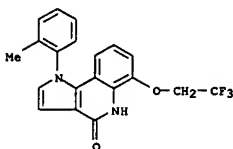


RN 220854-32-0 CAPLUS
 CN 4H-Pyrrolo[3,2-c]quinolin-4-one, 1,5-dihydro-1-(4-fluoro-2-methylphenyl)-6-(trifluoromethoxy)- (9CI) (CA INDEX NAME)

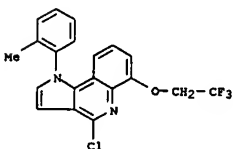
L7 ANSWER 30 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)
 methyl-, methanesulfonate (ester) (9CI) (CA INDEX NAME)



RN 220854-46-6 CAPLUS
 CN 4H-Pyrrolo[3,2-c]quinolin-4-one, 1,5-dihydro-1-(2-methylphenyl)-6-(2,2,2-trifluoroethoxy)- (9CI) (CA INDEX NAME)

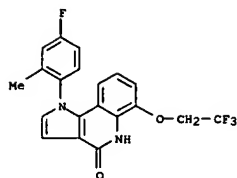


RN 220854-47-7 CAPLUS
 CN 1H-Pyrrolo[3,2-c]quinoline, 4-chloro-1-(2-methylphenyl)-6-(2,2,2-trifluoroethoxy)- (9CI) (CA INDEX NAME)

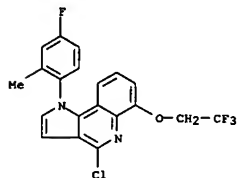


RN 220854-53-5 CAPLUS
 CN 4H-Pyrrolo[3,2-c]quinolin-4-one, 1-(4-fluoro-2-methylphenyl)-1,5-dihydro-6-(2,2,2-trifluoroethoxy)- (9CI) (CA INDEX NAME)

L7 ANSWER 30 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

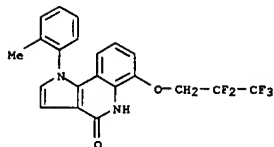


RN 220854-54-6 CAPLUS
 CN 1H-Pyrrolo[3,2-c]quinoline,
 4-chloro-1-(4-fluoro-2-methylphenyl)-6-(2,2,2-
 trifluoroethoxy)- (9CI) (CA INDEX NAME)

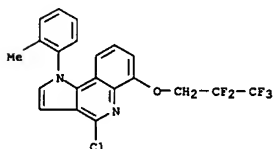


RN 220854-62-6 CAPLUS
 CN 4H-Pyrrolo[3,2-c]quinolin-4-one, 1,5-dihydro-1-(2-methyl-4-
 ((methylsulfonyl)oxy)phenyl)-6-(2,2,2-trifluoroethoxy)- (9CI) (CA INDEX
 NAME)

L7 ANSWER 30 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

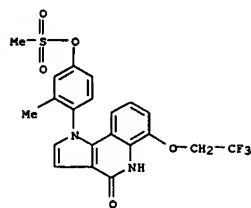


RN 220854-73-9 CAPLUS
 CN 1H-Pyrrolo[3,2-c]quinoline, 4-chloro-1-(2-methylphenyl)-6-(2,2,3,3-
 pentafluoropropoxy)- (9CI) (CA INDEX NAME)

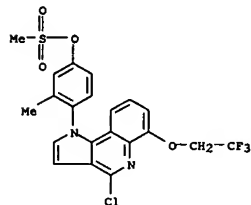


RE.CNT 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 30 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



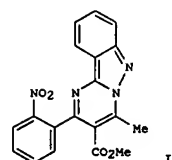
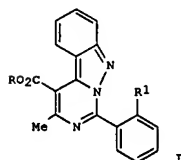
RN 220854-63-7 CAPLUS
 CN Phenol,
 4-[4-chloro-6-(2,2,2-trifluoroethoxy)-1H-pyrrolo[3,2-c]quinolin-1-
 yl]-3-methyl-, methanesulfonate (ester) (9CI) (CA INDEX NAME)



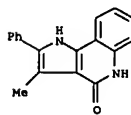
RN 220854-72-8 CAPLUS
 CN 4H-Pyrrolo[3,2-c]quinolin-4-one, 1,5-dihydro-1-(2-methylphenyl)-6-
 (2,2,3,3,3-pentafluoropropoxy)- (9CI) (CA INDEX NAME)

L7 ANSWER 31 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN

AN 1998:07138 CAPLUS
 DN 130:95529
 TI Stability investigations on alkyl 2,4-diaryl-6-methyl-1,2,3,4-
 tetrahydropyrimidine-5-carboxylates
 AU Goerlitz, K.; Heinrici, C.
 CS Inst. Pharmazeutische Chemie, Technische Univ. Braunschweig,
 Braunschweig,
 D-38106, Germany
 SO Pharmazie (1998), 53(12), 847-853
 CODEN: PHARAT; ISSN: 0031-7144
 PB Govt-Verlag Pharmazeutischer Verlag
 DT Journal
 LA German
 OS CASREACT 130:95529
 GI

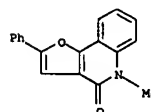


AB 2-Phenyl-4-(2-nitrophenyl)-6-methyl-1,2,3,4-tetrahydropyrimidine-5-
 carboxylates react with UV-A light to yield pyrimido[1,6-b]indazoles I (R
 = Me, Et; R1 = H). Irradiation of
 2,4-bis(2-nitrophenyl)-6-methyl-1,2,3,4-
 tetrahydropyrimidine-5-carboxylate does not give the corresponding
 2,4-bis(2-nitrosophenyl)pyrimidine, but a mixture of pyrimido[1,6-b]- and
 -[1,2-b]indazoles, I (R = Me, R1 = NO2) and II, resp. Products obtained
 by oxidation and reduction of the 1,2,3,4-tetrahydropyrimidines are
 reported
 including the synthesis of pyrido[5,4-b]quinolines.
 IT 219586-15-92
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation and photochem. of arylhydropyrimidinecarboxylates)
 RN 219586-15-9 CAPLUS
 CN 4H-Pyrrolo[3,2-c]quinolin-4-one, 1,5-dihydro-3-methyl-2-phenyl- (9CI)
 (CA INDEX NAME)



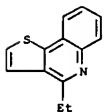
L7 ANSWER 31 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)
 RE.CNT 10 THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 32 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 1998:69946 CAPLUS
 DN 130:24930
 TI Efficient one-step synthesis of 2-arylfurans by ceric ammonium nitrate (CAN)-mediated cycloaddition of 1,3-dicarbonyl compounds to alkynes
 AU Lee, Yong Rok; Byun, Myung Whan; Kim, Byung So
 CS School of Chemical Engineering and Technology, College of Engineering, Yeungnam University, Kyongsan, 712-749, S. Korea
 SO Bulletin of the Korean Chemical Society (1998), 19(10), 1080-1083
 CODEN: BKCSDE; ISSN: 0253-2964
 PB Korean Chemical Society
 DT Journal
 LA English
 OS CASREACT 130:24930
 AB An efficient method for construction of 2-arylfurans has been developed by
 ceric(IV) ammonium nitrate-mediated oxidative cycloaddn. of cyclic and acyclic 1,3-dicarbonyl compds. to several alkynes. Reactions of 1,3-cyclohexanedione, 1,3-cyclopentanedione, and 2,4-pentanedione with several alkynes furnish 2-arylfurans in 26-75% yields. Extension of this technol. to more complex 4-hydroxy-2-quinolone and 3-hydroxy-1H-phenalen-1-one with phenylacetylene also affords furoquinolinone and furophenalenone derivative in moderate yields. Reaction of 4-hydroxycoumarins with phenylacetylene give linear and angular furocoumarin derivs. as a mixture of regioisomers in good yields. The mechanistic pathway for the formation of 2-arylfurans has been also described.
 IT 216305-43-0P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (ceric(IV) ammonium nitrate-mediated oxidative cycloaddn. of 1,3-dicarbonyl compds. to alkynes)
 RN 216305-43-0 CAPLUS
 CN Furo[3,2-c]quinolin-4(5H)-one, 5-methyl-2-phenyl- (9CI) (CA INDEX NAME)

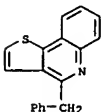


RE.CNT 30 THERE ARE 30 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 33 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 1998:68010 CAPLUS
 DN 130:110203
 TI v-Triazolines. Part 40. Thermal and photochemical transformations of 1-biaryl-5-amino-4,5-dihydro-v-triazoles: a new synthetic approach to 6-alkylphenanthridines and aza-analogs
 AU Erba, Emanuela; Pocar, Donato; Trimarco, Pasqualina
 CS Facolta di Farmacia e Centro Interuniversitario di Ricerca sulle Reazioni Pericicliche e Sintesi di Sistemi Etero- e Carbociclici, Istituto di Chimica Organica, Universita degli Studi di Milano, Milan, I-20133, Italy
 SO Journal of the Chemical Society, Perkin Transactions 1: Organic and Bio-Organic Chemistry (1998), (21), 3535-3540
 CODEN: JCPRB4; ISSN: 0300-922X
 PB Royal Society of Chemistry
 DT Journal
 LA English
 OS CASREACT 130:110203
 AB 1-Biaryl-5-morpholino-1,2,3-triazolines were prepared from aliphatic aldehydes, morpholine and 2-azidobiaryls. They underwent smooth thermal rearrangement to tertiary amidines which were photochem. cyclized to 6-alkylphenanthridines and analogs with morpholine elimination. Direct photolysis of the triazolines afforded lower yields of the same compds. together with byproducts indicative of the mechanism of the photochem. rearrangement which is discussed.
 IT 219761-05-4P 219761-07-6P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation and thermal and photochem. transformation of biaryl(morpholino)triazolines)
 RN 219761-05-4 CAPLUS
 CN Thieno[3,2-c]quinoline, 4-ethyl- (9CI) (CA INDEX NAME)

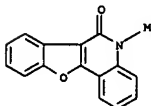


RN 219761-07-6 CAPLUS
 CN Thieno[3,2-c]quinoline, 4-(phenylmethyl)- (9CI) (CA INDEX NAME)



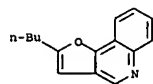
RE.CNT 29 THERE ARE 29 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 34 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 1998:469549 CAPLUS
 DN 129:189252
 TI Regioselective synthesis of heterocycles from 3-cyclohex-2-enyl-4-hydroxy-1-methylquinolin-2-(1H)-one
 AU Majumdar, K. C.; Bhattacharyya, T.
 CS Department of Chemistry, University of Kalyani, Kalyani, 741235, India
 SO Synthetic Communications (1998), 28(15), 2907-2923
 CODEN: SYNGAV; ISSN: 0039-7911
 PB Marcel Dekker, Inc.
 DT Journal
 LA English
 OS CASREACT 129:189252
 AB 3-Cyclohex-2-enyl-4-hydroxyl-1-methylquinolin-2(1H)-one (I) reacts with pyridine hydrotribromide in CH2Cl2 at 0-5°C for 0.75h to give a furo-fused heterocycle in 96% yield. This product on treatment with KOH-EtOH eliminates HBr to give a compound which on treatment with Pd-C in refluxing di-Ph ether for 0.5h furnishes benzofuro[3,2-c]quinolone in 90% yield. I on sequential treatment with Ac2O-AcONa and Br2/AcOH followed by KOH-EtOH, however, produces a bicyclic product in excellent overall yield. I reacts with 1 equiv of m-chloroperbenzoic acid in refluxing benzene to furnish a bicyclic heterocycle in 80% yield.
 IT 76870-56-9P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (regioselective heterocyclization of cyclohexenylhydroxymethylquinoline ne)
 RN 76870-56-9 CAPLUS
 CN Benzofuro[3,2-c]quinolin-6(5H)-one, 5-methyl- (9CI) (CA INDEX NAME)

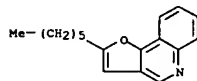


RE.CNT 21 THERE ARE 21 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 35 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 1998:454039 CAPLUS
 DN 129:161518
 TI Novel heteroaromatic C-H insertion of alkylidenecarbenes. A new entry to furopyridine synthesis
 AU Kitamura, Tsugio; Tsuda, Kuniyuki; Fujiwara, Yuzo
 CS Department of Chemistry and Biochemistry, Graduate School of Engineering, Kyushu University, Fukuoka, 812-8581, Japan
 SO Tetrahedron Letters (1998), 39(30), 5375-5376
 CODEN: TELEAY; ISSN: 0040-4039
 PB Elsevier Science Ltd.
 DT Journal
 LA English
 OS CASREACT 129:161518
 AB Reaction of alkynyl(phenyl)iodonium tosylates with 4-hydroxypyridine and 3-hydroxypyridine in the presence of potassium tert-butoxide undergoes a novel heteroarom. C-H insertion of alkylidenecarbenes generated in situ to give the corresponding furopyridine derivs. The heteroarom. C-H insertion shows an extremely high selectivity compared with the possible aliphatic C-H insertion. This process is also applied to furoquinoline synthesis.
 IT 211300-14-0P 211300-15-1P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (synthesis of furopyridines via heteroarom. C-H insertion of alkylidenecarbenes)
 RN 211300-14-0 CAPLUS
 CN Furo[3,2-c]quinoline, 2-butyl- (9CI) (CA INDEX NAME)

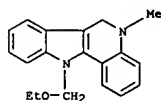


RN 211300-15-1 CAPLUS
 CN Furo[3,2-c]quinoline, 2-hexyl- (9CI) (CA INDEX NAME)



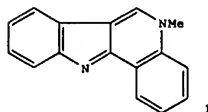
RE.CNT 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 36 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)
 CN 5H-Indolo[3,2-c]quinoline, 11-(ethoxymethyl)-6,11-dihydro-5-methyl- (9CI) (CA INDEX NAME)

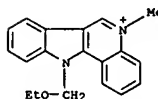


RE.CNT 27 THERE ARE 27 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 36 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 1998:433511 CAPLUS
 DN 129:203128
 TI A Synthesis of Isocryptolepine
 AU Murray, Paul E.; Mills, Keith; Joule, John A.
 CS Chemistry Department, The University of Manchester, Manchester, M13 9PL, UK
 SO Journal of Chemical Research, Synopses (1998), (7), 377, 1435-1447
 CODEN: JRPSDC; ISSN: 0308-2342
 PB Royal Society of Chemistry
 DT Journal
 LA English
 OS CASREACT 129:203128
 GI

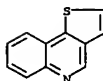


AB A synthesis of isocryptolepine I is described the key steps in which are (a) palladium(0) coupling to an indol-2-ylstannane and (b) an intramol. Vilsmeier reaction to construct the 3-aminoalkylidene-3H-indole unit of the alkaloid.
 IT 212055-16-0P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
 (synthesis of isocryptolepine)
 RN 212055-16-8 CAPLUS
 CN 11H-Indolo[3,2-c]quinolinium, 11-(ethoxymethyl)-5-methyl- (9CI) (CA INDEX NAME)

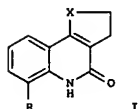


IT 212055-18-0P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (synthesis of isocryptolepine)
 RN 212055-18-0 CAPLUS

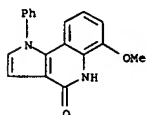
L7 ANSWER 37 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 1998:256744 CAPLUS
 DN 128:321570
 TI Thienoquinolines
 AU Dabaeva, V. V.; Noravryan, A. S.; Enokyan, B. D.; Madakyan, V. N.
 CS Inst. Tonk. Org. Khim. im. Mndzhoyana, NAN, Yerevan, Armenia
 SO Khimicheskii Zhurnal Armenii (1997), 50(3-4), 83-97
 CODEN: KZARF3
 PB Izdatel'stvo Gitutyun NAN Respubliki Armenii
 DT Journal; General Review
 LA Russian
 AB A review with 68 refs. on the preparation of thieno[2,3-b]quinolines and their [3,2-c], [3,2-b], [2,3-c], and [3,4-b] analogs and reactions of thieno[2,3-b]quinolines.
 IT 234-43-5DP, Thieno[3,2-c]quinoline, deriva.
 RL: SPN (Synthetic preparation); PREP (Preparation)
 RN 234-43-5 CAPLUS
 CN Thieno[3,2-c]quinoline (8CI, 9CI) (CA INDEX NAME)



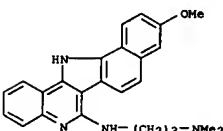
L7 ANSWER 38 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 1998:203592 CAPLUS
 DN 128:294717
 TI A facile method for direct conversion of dihydrofuroquinolones to dihydropyrroloquinolones
 AU Kim, Sung Soo; Cheon, Hye Gyeong; Kang, Seung Kyu; Yum, Eul Kgun; Choi, Joong-Kwon
 CS Bio-Organic Sci. Div., Korea Res. Inst. Chemical Technol., Taejeon, 305-343, S. Korea
 SO Heterocycles (1998), 48(2), 221-226
 CODEN: HETCYAM; ISSN: 0385-5414
 PB Japan Institute of Heterocyclic Chemistry
 DT Journal
 LA English
 OS CASREACT 128:294717
 GI



AB A novel and efficient method is described for one-step conversion of dihydrofuroquinolones I (X = O; R = OMe, Me) to dihydropyrroloquinolones I
 I (X = NR1, R1 = Ph, 2-MeC6H4, 2,4-Me(OMe)C6H3, etc.) in high yields under mild conditions. Thus, treatment of I (X = O; R = MeO) with PhNH2 in diethylene glycol at 250° gave 87% I (X = PhN; R = MeO).
 IT 206051-95-8P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation of pyrroloquinolones by condensation of furoquinolones with amines)
 RN 206051-95-8 CAPLUS
 CN 4H-Pyrrolo[3,2-c]quinolin-4-one, 1,5-dihydro-6-methoxy-1-phenyl- (9CI) (CA INDEX NAME)



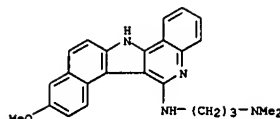
L7 ANSWER 39 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 1998:150272 CAPLUS
 DN 128:291584
 TI Synthesis of 13H-Benzo[6,7]- and 13H-Benzo[4,5]indolo[3,2-c]-quinolines: A New Series of Potent Specific Ligands for Triplex DNA
 AU Nguyen, Chi Hung; Marchand, Christophe; Delage, Stephane; Sun, Jian-Sheng; Garestier, Therese; Helene, Claude; Bisagni, Emile
 CS Section Recherche, UMR 176 CNRS-Institut Curie, Orsay, 91405, Fr.
 SO Journal of the American Chemical Society (1998), 120(11), 2501-2507
 CODEN: JACSAT; ISSN: 0002-7863
 PB American Chemical Society
 DT Journal
 LA English
 AB Triple-helical complexes formed upon binding of oligonucleotides to oligopyrimidine-oligopurine sequences of double-helical DNA can be stabilized by intercalating ligands such as benzopyridoindole derivs. (Mergny et al. Science 1992, 256, 1681). Based on mol. modeling studies, it was predicted that better stacking interactions could be achieved between the intercalator and base triplets by extending the size of the aromatic ring system. Here the synthesis of pentacyclic aromatic mols. which exhibit a highly selective binding to triplex structures is described. The thermal Fischer indolization of hydrazones resulting from 4-hydrazinoquinolin-2(1H)-one and 6-methoxy-1 (and -2) -tetralones led to the expected cyclized intermediates. After complete aromatization, these compds. were transformed by phosphorus oxychloride giving 6-chloro-10-methoxy-13H-benzo[6,7]- (and 6-chloro-9-methoxy-13H-benzo[4,5]-) indolo[3,2-c]quinolines. Usual substitution by various diamines provided derivs. of these pentacyclic ring systems which are, so far, the most potent DNA triplex-specific ligands ever described in our studies.
 IT 206116-80-1P 206116-80-5P 206116-83-8P
 206116-86-1P 206116-89-4P 206116-90-7P
 RL: BPR (Biological process); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation);
 PROC (Process)
 (synthesis of benzo and benzoindoloquinolines as new series of potent specific ligands for triplex DNA)
 RN 206116-78-1 CAPLUS
 CN 1,3-Propanediamine, N'-(10-methoxy-13H-benz[6,7]indolo[3,2-c]quinolin-6-yl)-N,N-dimethyl- (9CI) (CA INDEX NAME)



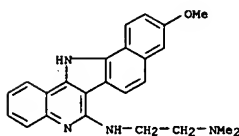
RN 206116-80-5 CAPLUS
 CN 1,3-Propanediamine, N'-(9-methoxy-13H-benz[4,5]indolo[3,2-c]quinolin-6-yl)-N,N-dimethyl- (9CI) (CA INDEX NAME)

L7 ANSWER 38 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)
 RE.CNT 13 THERE ARE 13 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

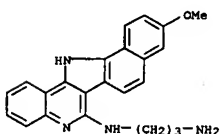
L7 ANSWER 39 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



RN 206116-83-8 CAPLUS
 CN 1,2-Ethanediamine, N'-(10-methoxy-13H-benz[6,7]indolo[3,2-c]quinolin-6-yl)-N,N-dimethyl- (9CI) (CA INDEX NAME)

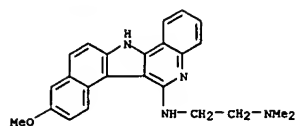


RN 206116-86-1 CAPLUS
 CN 1,3-Propanediamine, N'-(10-methoxy-13H-benz[6,7]indolo[3,2-c]quinolin-6-yl)- (9CI) (CA INDEX NAME)

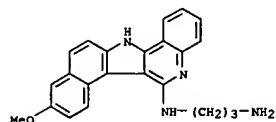


RN 206116-89-4 CAPLUS
 CN 1,2-Ethanediamine, N'-(9-methoxy-13H-benz[4,5]indolo[3,2-c]quinolin-6-yl)-N,N-dimethyl- (9CI) (CA INDEX NAME)

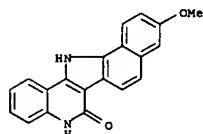
L7 ANSWER 39 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



RN 206116-90-7 CAPLUS
CN 1,3-Propanediamine,
N-(9-methoxy-13H-benz[4,5]indolo[3,2-c]quinolin-6-yl)-
(9CI) (CA INDEX NAME)



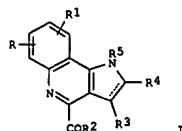
IT 206116-84-9P 206116-85-0P 206116-87-2P
206116-88-3P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
(Reactant or reagent)
(synthesis of benzo and benzoindoloquinolines as new series of potent
specific ligands for triplex DNA)
RN 206116-84-9 CAPLUS
CN 6H-Benz[6,7]indolo[3,2-c]quinolin-6-one, 5,13-dihydro-10-methoxy- (9CI)
(CA INDEX NAME)



RN 206116-85-0 CAPLUS
CN 13H-Benz[6,7]indolo[3,2-c]quinoline, 6-chloro-10-methoxy- (9CI) (CA
INDEX NAME)

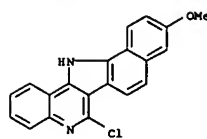
L7 ANSWER 40 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN

AN 1998:112361 CAPLUS
DN 128:167408
TI Preparation of pyrrolo[3,2-c]quinolines for the prevention and/or
treatment of neurodegenerative diseases.
IN Pevarello, Paolo; Heidempergher, Franco; Della Torre, Arturo; Varasi,
Mario; Speciale, Carmela
FA Pharmacia & Upjohn S.P.A., Italy
SO PCT Int. Appl., 29 pp.
CODEN: F1XXD2
DT Patent
LA English
FAN.CNT 1
PATENT NO. KIND DATE APPLICATION NO. DATE
PI WO 9805660 A1 19980212 WO 1997-EP3639 19970704
W: JP
RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT,
SE GB 2316072 A1 19980218 GB 1996-16467 19960805
GB 2316072 B2 20000510
EP 922044 A1 19990616 EP 1997-936632 19970704
EP 922044 B1 20011010
R: DE, GB, IT
JP 2000515528 T2 20001121 JP 1998-507507 19970704
PRAI GB 1996-16467 A 19960805
WO 1997-EP3639 W 19970704
OS MARPAT 128:167408
GI

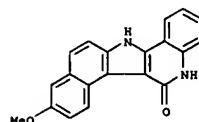


AB Title compds. [I; R, R1 = H, halo, OH, CF3, cyano, NO2, Ph, PhCH2, alkyl,
alkoxy, alkylthio, SO2R6, SO2R6, SO2NH2, formyl, alkanoyl, carboxy,
alkoxycarbonyl, NR7R8; R7, R8 = H, alkyl, formyl, alkanoyl; R2 = OH,
alkoxy, NR9R10; R9, R10 = H, alkyl, Ph, NHOR11; R11 = H, alkyl, benzyl,
phenyl; R3, R4, R6 = H, alkyl, benzyl, phenyl; R5 = H, alkyl, benzyl,
alkenyl, alkynyl, formyl; dotted line = optional double bond],
were prepared. Thus, 7-chloro-3-methyl-1H-pyrrolo[3,2-c]quinoline was
refluxed with Ac2O to give 1-(7-chloro-3-methylpyrrolo[3,2-c]quinolin-1-
yl)ethanone. The latter with KCN in H2O/CH2Cl2 were treated over 2 h
with
PhCOCl to give 1-acetyl-5-benzoyl-7-chloro-3-methyl-4,5-dihydro-1H-
pyrrolo[3,2-c]quinoline-4-carbonitrile. This was heated with HBr in AcOH
to give 7-chloro-3-methyl-1H-pyrrolo[3,2-c]quinoline-4-carboxylic acid.
The latter inhibited kynurenine 3-hydroxylase in rat liver with IC50 = 24

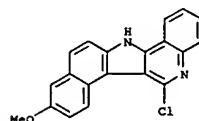
L7 ANSWER 39 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



RN 206116-87-2 CAPLUS
CN 6H-Benz[4,5]indolo[3,2-c]quinolin-6-one, 5,13-dihydro-9-methoxy- (9CI)
(CA INDEX NAME)



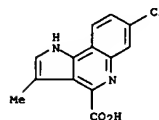
RN 206116-88-3 CAPLUS
CN 13H-Benz[4,5]indolo[3,2-c]quinoline, 6-chloro-9-methoxy- (9CI) (CA INDEX
NAME)



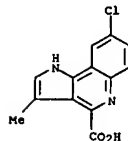
RE.CNT 29 THERE ARE 29 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 40 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

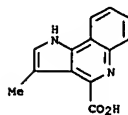
IT 202974-75-2P 202974-76-3P 202974-77-4P
202974-78-5P 202974-79-6P 202974-80-9P
202974-81-0P
RL: BAC (Biological activity or effector, except adverse); BSU
(Biological
study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use);
BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of pyrrolo[3,2-c]quinolines for the prevention and/or
treatment of neurodegenerative diseases)
RN 202974-75-2 CAPLUS
CN 1H-Pyrrolo[3,2-c]quinoline-4-carboxylic acid, 7-chloro-3-methyl- (9CI)
(CA INDEX NAME)



RN 202974-76-3 CAPLUS
CN 1H-Pyrrolo[3,2-c]quinoline-4-carboxylic acid, 8-chloro-3-methyl- (9CI)
(CA INDEX NAME)

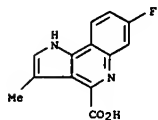


RN 202974-77-4 CAPLUS
CN 1H-Pyrrolo[3,2-c]quinoline-4-carboxylic acid, 3-methyl- (9CI) (CA INDEX
NAME)

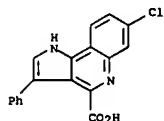


RN 202974-78-5 CAPLUS

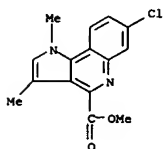
L7 ANSWER 40 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)
 CN 1H-Pyrrolo[3,2-c]quinoline-4-carboxylic acid, 7-fluoro-3-methyl- (9CI)
 (CA INDEX NAME)



RN 202974-79-6 CAPLUS
 CN 1H-Pyrrolo[3,2-c]quinoline-4-carboxylic acid, 7-chloro-3-phenyl- (9CI)
 (CA INDEX NAME)

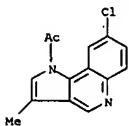


RN 202974-80-9 CAPLUS
 CN 1H-Pyrrolo[3,2-c]quinoline-4-carboxylic acid, 7-chloro-1,3-dimethyl-
 methyl ester (9CI) (CA INDEX NAME)

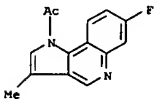


RN 202974-81-0 CAPLUS
 CN 1H-Pyrrolo[3,2-c]quinoline-4-carboxylic acid, 7-chloro-1,3-dimethyl-
 (9CI) (CA INDEX NAME)

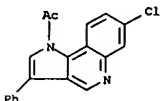
L7 ANSWER 40 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



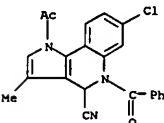
RN 202974-69-4 CAPLUS
 CN 1H-Pyrrolo[3,2-c]quinoline, 1-acetyl-7-fluoro-3-methyl- (9CI) (CA INDEX NAME)



RN 202974-70-7 CAPLUS
 CN 1H-Pyrrolo[3,2-c]quinoline, 1-acetyl-7-chloro-3-phenyl- (9CI) (CA INDEX NAME)

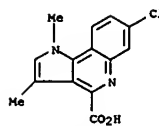


RN 202974-71-8 CAPLUS
 CN 1H-Pyrrolo[3,2-c]quinoline-4-carbonitrile,
 1-acetyl-5-benzoyl-7-chloro-4,5-
 dihydro-3-methyl- (9CI) (CA INDEX NAME)

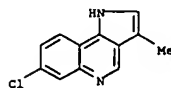


RN 202974-72-9 CAPLUS
 CN 1H-Pyrrolo[3,2-c]quinoline-4-carbonitrile,
 1-acetyl-5-benzoyl-8-chloro-4,3-
 dihydro-3-methyl- (9CI) (CA INDEX NAME)

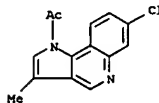
L7 ANSWER 40 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



IT 68499-93-4
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (preparation of pyrrolo[3,2-c]quinolines for the prevention and/or
 treatment
 of neurodegenerative diseases)
 RN 68499-93-4 CAPLUS
 CN 1H-Pyrrolo[3,2-c]quinoline, 7-chloro-3-methyl- (9CI) (CA INDEX NAME)

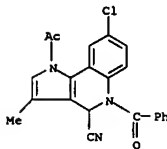


IT 202974-67-2P 202974-68-3P 202974-69-4P
 202974-70-7P 202974-71-8P 202974-72-9P
 202974-73-0P 202974-74-1P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
 (Reactant or reagent)
 (preparation of pyrrolo[3,2-c]quinolines for the prevention and/or
 treatment
 of neurodegenerative diseases)
 RN 202974-67-2 CAPLUS
 CN 1H-Pyrrolo[3,2-c]quinoline, 1-acetyl-7-chloro-3-methyl- (9CI) (CA INDEX NAME)

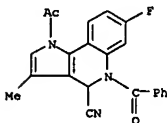


RN 202974-68-3 CAPLUS
 CN 1H-Pyrrolo[3,2-c]quinoline, 1-acetyl-8-chloro-3-methyl- (9CI) (CA INDEX NAME)

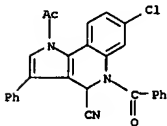
L7 ANSWER 40 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



RN 202974-73-0 CAPLUS
 CN 1H-Pyrrolo[3,2-c]quinoline-4-carbonitrile,
 1-acetyl-5-benzoyl-7-fluoro-4,5-
 dihydro-3-methyl- (9CI) (CA INDEX NAME)

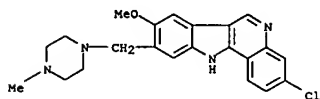


RN 202974-74-1 CAPLUS
 CN 1H-Pyrrolo[3,2-c]quinoline-4-carbonitrile,
 1-acetyl-5-benzoyl-7-chloro-4,5-
 dihydro-3-phenyl- (9CI) (CA INDEX NAME)



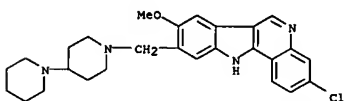
RE.CNT 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 41 OF 273 CAPLUS COPYRIGHT 2005 ACS ON STN
 AN 1997:780585 CAPLUS
 DN 128:225706
 TI Structure-activity relationships of some indolo[3,2-c]quinolines with antimalarial activity.
 AU Go, Mei-lin; Ngiam, Tong-Lan; Lay-Choo Tan, Agnes; Kuaha, Kunika; Wilairat, Prapon
 CS 10, Department of Pharmacy, National University of Singapore, Kent Ridge Crescent, Japan
 SO European Journal of Pharmaceutical Sciences (1998), 6(1), 19-26
 CODEN: EPSCED; ISSN: 0928-0987
 PB Elsevier Science Ireland Ltd.
 DT Journal
 LA English
 AB The synthesis, physicochem. characterization and in vitro antimalarial activity of a series of indolo[3,2-c]quinolines are described. There is only a poor correlation between the activity and hydrophobicity. In contrast, 33% of the observed variation in antimalarial activity can be attributed to the size of the side chain attached to position 9 of the indoloquinoline ring. An increase in the size of this dibasic side chain generally results in a reduction in activity, suggesting that it is accommodated in a site/cavity of limited size on the receptor. More significantly, the charge on the distal nitrogen (N3) on the side chain, located 10-11 Å from the quinoline N, could account for 75 of the observed variation. Since a large charge on N3 is associated with improved antimalarial activity, it is suggested that N3 is protonated and functions as a H bond donor in the drug-receptor interaction.
 IT 144190-97-6 204774-60-7 204774-63-0
 204774-66-3 204774-69-6 204774-72-1
 RI: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study) (structure-activity relationships of some indolo[3,2-c]quinolines with antimalarial activity)
 RN 144190-97-6 CAPLUS
 CN 11H-Indolo[3,2-c]quinoline, 3-chloro-8-methoxy-9-[(4-methyl-1-piperazinyl)methyl]- (9CI) (CA INDEX NAME)



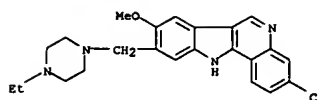
RN 204774-60-7 CAPLUS
 CN 11H-Indolo[3,2-c]quinoline, 3-chloro-9-[(4-ethyl-1-piperazinyl)methyl]-8-methoxy- (9CI) (CA INDEX NAME)

L7 ANSWER 41 OF 273 CAPLUS COPYRIGHT 2005 ACS ON STN (Continued)

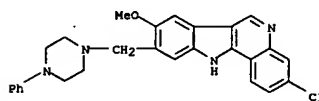


RE.CNT 12 THERE ARE 12 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

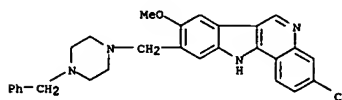
L7 ANSWER 41 OF 273 CAPLUS COPYRIGHT 2005 ACS ON STN (Continued)



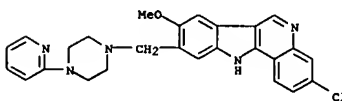
RN 204774-63-0 CAPLUS
 CN 11H-Indolo[3,2-c]quinoline, 3-chloro-8-methoxy-9-[(4-phenyl-1-piperazinyl)methyl]- (9CI) (CA INDEX NAME)



RN 204774-66-3 CAPLUS
 CN 11H-Indolo[3,2-c]quinoline, 3-chloro-8-methoxy-9-[(4-(phenylmethyl)-1-piperazinyl)methyl]- (9CI) (CA INDEX NAME)



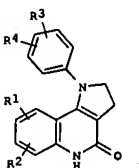
RN 204774-69-6 CAPLUS
 CN 11H-Indolo[3,2-c]quinoline, 3-chloro-8-methoxy-9-[(4-(2-pyridinyl)-1-piperazinyl)methyl]- (9CI) (CA INDEX NAME)



RN 204774-72-1 CAPLUS
 CN 11H-Indolo[3,2-c]quinoline, 9-[(1,4'-bipiperidin-1'-yl)methyl]-3-chloro-8-methoxy- (9CI) (CA INDEX NAME)

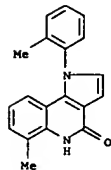
L7 ANSWER 42 OF 273 CAPLUS COPYRIGHT 2005 ACS ON STN
 AN 1997:776168 CAPLUS
 DN 128:34754
 TI Preparation of 1-aryl-4-oxopyrrolo[3,2-c]quinoline derivatives from the corresponding furoquinolines and anilines.
 IN Choi, Joong Kwon; Kim, Sung Soo; Yum, Eul Kyun; Cho, Sung Yun; Kang, Seung Kyu
 PA Korea Research Institute of Chemical Technology, S. Korea; Choi, Joong Kwon; Kim, Sung Soo; Yum, Eul Kyun; Cho, Sung Yun; Kang, Seung Kyu
 SO PCT Int. Appl., 37 pp.
 CODEN: PIKX2
 DT Patent
 LA English
 FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9744342	A1	19971127	WO 1997-KR74	19970502
W: JP, US RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT,				
KR 187475	B1	19990501	KR 1996-16624	19960517
EP 653622	A1	19980722	EP 1997-920967	19970502
R: DE, FR, GB, IT				
JP 11503765	T2	19990330	JP 1997-542059	19970502
JP 3107834	B2	20001113		
US 5914402	A	19990622	US 1998-983388	19980116
KR 1996-16624	A	19960517		
WO 1997-KR74	W	19970502		
OS CASREACT 128:34754; MARPAT 128:34754				
GI				

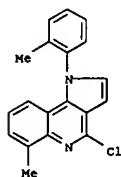


AB Title compds. (I; R1, R2 = H, alkyl, alkoxy, alkylthio, haloalkoxy, CF3, hydroxyalkoxy, OH; R3, R4 = H, halo, OH, alkyl, alkoxy, alkylthio, haloalkyl, CF3, OH, amino, halo), were prepared by reaction of the corresponding 4-oxofuro[3,2-c]quinolines with the corresponding anilines. Thus, 4-oxo-6-methyl-2,3-dihydrofuro[3,2-c]quinoline and 2-methylaniline were heated in diethylene glycol in a pressure tube at 250° for 15 h to give 82% 1-(2-methylphenyl)-4-oxo-6-methyl-2,3,4,5-tetrahydropyrrolo[3,2-c]quinoline.

L7 ANSWER 42 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)
 IT 122456-59-1P 122456-60-4P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
 (preparation of 1-aryl-4-oxopyrrolo[3,2-c]quinoline derivs. from the corresponding furoquinolines and anilines)
 RN 122456-59-1 CAPLUS
 CN 4H-Pyrrolo[3,2-c]quinolin-4-one, 1,5-dihydro-6-methyl-1-(2-methylphenyl)- (9CI) (CA INDEX NAME)



RN 122456-60-4 CAPLUS
 CN 1H-Pyrrolo[3,2-c]quinoline, 4-chloro-6-methyl-1-(2-methylphenyl)- (9CI) (CA INDEX NAME)



IT 122456-42-2P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation of 1-aryl-4-oxopyrrolo[3,2-c]quinoline derivs. from the corresponding furoquinolines and anilines)
 RN 122456-42-2 CAPLUS
 CN Ethanol, 2-[[6-methyl-1-(2-methylphenyl)-1H-pyrrolo[3,2-c]quinolin-4-yl]amino]- (9CI) (CA INDEX NAME)

L7 ANSWER 43 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 1997:727378 CAPLUS
 DN 128:30042
 TI Effect of plasma protein binding on in vivo activity and brain penetration
 of glycine/NMDA receptor antagonists
 AU Rowley, Michael; Kulagowski, Janusz J.; Watt, Alan P.; Rathbone, Denise; Stevenson, Graeme I.; Carling, Robert W.; Baker, Raymond; Marshall, George
 R.; Kemp, John A.; Foster, Alan C.; Grimwood, Sarah; Hargreaves, Richard; Hurley, Catherine; Saywell, Kay L.; Tricklebank, Mark D.; Leeson, Paul D.
 CS Neuroscience Research Centre, Merck Sharp and Dohme Research Laboratories, Harlow/Essex, CM20 2QR, UK
 SO Journal of Medicinal Chemistry (1997), 40(25), 4053-4068
 CODEN: JMCMAR; ISSN: 0022-2623
 PB American Chemical Society
 DT Journal
 LA English
 AB A major issue in designing drugs as antagonists at the glycine site of the

NMDA receptor has been to achieve good in vivo activity. A series of 4-hydroxyquinolone glycine antagonists was active in the DBA/2 mouse anticonvulsant assay, but improvements in in vitro affinity were not mirrored by corresponding increases in anticonvulsant activity. Here we show that binding of the compds. to plasma protein limits their brain penetration. Relative binding to the major plasma protein, albumin, was measured in two different ways: by a radioligand binding experiment or

using an HPLC assay, for a wide structural range of glycine/NMDA site ligands. These measures of plasma protein binding correlate well ($r = 0.84$), and the HPLC assay has been used extensively to quantify plasma protein binding. For the 4-hydroxyquinolone series, binding to plasma protein correlates ($r = 0.92$) with log P (octanol/pH 7.4 buffer) over a range of log P values from 0 to 5. The anticonvulsant activity increases with in vitro affinity, but the slope of a plot of ED_{50} vs. pK_{50} is low (0.40); taking plasma protein binding into account in this plot increases the slope to 0.60. This shows that binding to albumin in plasma reduces the amount of compound free to diffuse across the blood-brain barrier.

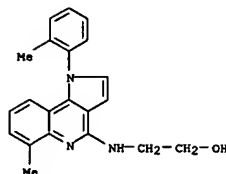
Further evidence comes from three other expts.: (a) Direct measurements of brain/blood ratios for three compds. (2, 16, 26) show the ratio decreases with increasing log P. (b) Warfarin, which competes for albumin binding sites dose-dependently, decreased the ED_{50} of 26 for protection against seizures induced by NMDA. (c) Direct measurements of brain penetration using an in situ brain perfusion model in rat to measure the amount of

drug crossing the blood-brain barrier showed that compds. 2, 26, and 32 penetrate the brain well in the absence of plasma protein, but this is greatly reduced when the drug is delivered in plasma. In the 4-hydroxyquinolones glycine site binding affinity increases with lipophilicity of the 3-substituent up to a maximum at a log P around 3,

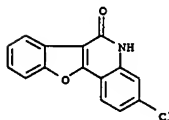
then does not improve further. When combined with increasing protein binding, this gives a parabolic relation between predicted in vivo activity and log

P, with a maximum log P value of 2.39. Finally, the plasma protein binding studies have been extended to other series of glycine site antagonists, and it is shown that for a given log P these have similar protein binding to the 4-hydroxyquinolones, except for compds. that are not acidic. The

L7 ANSWER 42 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

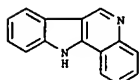


L7 ANSWER 43 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)
 results have implications for the design of novel glycine site antagonists, and it is suggested that it is necessary to either keep log P low or pKa high to obtain good central nervous system activity.
 IT 113737-87-4
 RL: BAC (Biological activity or effector, except adverse); BPR (Biological process); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
 (preparation and structure activity of hydroxyquinolones as anticonvulsant glycine antagonists and plasma protein binding and brain penetration)
 RN 113737-87-4 CAPLUS
 CN Benzofuro[3,2-c]quinolin-6(5H)-one, 3-chloro- (9CI) (CA INDEX NAME)

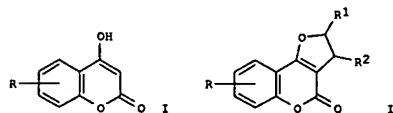


RE.CNT 55 THERE ARE 55 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

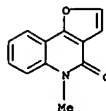
L7 ANSWER 44 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 1997:643202 CAPLUS
 DN 127:319128
 TI A convenient synthesis of two new indoloquinoline alkaloids
 AU Timari, Gera; Soos, Tibor; Hajos, Gyorgy
 CS Central Research Institute Chemistry, Hungarian Academy Sciences, Budapest, H-1525, Hung.
 SO Synlett (1997), (9), 1067-1068
 CODEN: SYNLES; ISSN: 0936-5214
 PB Thieme
 DT Journal
 LA English
 OS CASREACT 127:319128
 AB A concise synthesis of cryptosanguinolentine and cryptotackieine (neocryptolepine), isolated from *Cryptolepis sanguinolenta* is reported. The Pd-catalyzed cross-coupling reaction of 3-bromoquinoline or 3-bromo-N-methyl-2-quinolinone with 2-(pivaloylamino)phenylboronate gave the corresponding biaryls from which the indoloquinolines could be synthesized.
 IT 239-09-8P, 11H-Indolo[3,2-c]quinoline
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
 (synthesis of indoloquinoline alkaloids)
 RN 239-09-8 CAPLUS
 CN 11H-Indolo[3,2-c]quinoline (6CI, 7CI, 8CI, 9CI) (CA INDEX NAME)



L7 ANSWER 45 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 1997:481796 CAPLUS
 DN 127:205489
 TI Regioselective synthesis of furo[3,2-c][1]benzopyran-4-one and furo[3,2-c]quinolin-4-one
 AU Majumdar, Krishna C.; Bhattacharyya, Trijit
 CS Department Chemistry, University Kalyani, Kalyani, 741 235, India
 SO Journal of Chemical Research, Synopses (1997), (7), 244-245
 CODEN: JRPSCD; ISSN: 0308-2342
 PB Royal Society of Chemistry
 DT Journal
 LA English
 OS CASREACT 127:205489
 GI

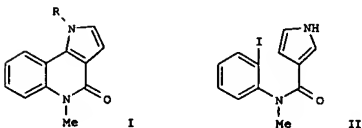


AB 4-Hydroxycoumarins I (R = H, 8-Me, 6-Me) and 4-hydroxy-1-methyl-2-quinolone react with chloroacetaldehyde in the presence of aqueous potassium carbonate to give 3-hydroxy-2,3-dihydrofuro derivs. II (R1 = H, R2 = OH) (60-75%) which on treatment with aqueous hydrochloric acid provide furo[3,2-c]coumarins II (R1R2 = bond) and the hitherto unreported 5-methylfuro[3,2-c]quinolin-4-one in nearly quant. yields.
 IT 67735-57-3P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (regioselective synthesis of furoquinoline and furobenzopyranone)
 RN 67735-57-3 CAPLUS
 CN Furo[3,2-c]quinolin-4(5H)-one, 5-methyl- (6CI, 9CI) (CA INDEX NAME)

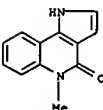


RE.CNT 15 THERE ARE 15 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 46 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 1997:408004 CAPLUS
 DN 127:95443
 TI A synthesis of the tricyclic pyrroloquinoline core of martinelline
 AU Ho, Tim C. T.; Jones, Keith
 CS Dep. Chem., King's College London, London, WC24 2LS, UK
 SO Tetrahedron (1997), 53(24), 8287-8294
 CODEN: TETRAH; ISSN: 0040-4020
 PB Elsevier
 DT Journal
 LA English
 OS CASREACT 127:95443
 GI

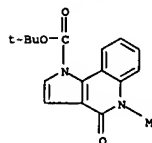


AB Preparation of pyrroloquinolines I (R = H, CO2Me3), which contains the core ring structure of the recently isolated martinelline and martinellie acid, was reported. The formation of the the tricyclic pyrrolo [3,2-c]quinoline ring system was accomplished via a Bu3SnH/AIBN radical cyclization of pyrrole amide II, which had been prepared by cyclization of 2-I-C6H4N(Me)COCH:CH2 and p-tosylmethyl isocyanide.
 IT 85157-98-8P 171776-97-8P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (synthesis of the tricyclic pyrroloquinoline core of martinelline)
 RN 85157-98-8 CAPLUS
 CN 4H-Pyrrolo[3,2-c]quinolin-4-one, 1,5-dihydro-5-methyl- (9CI) (CA INDEX NAME)



RN 171776-97-9 CAPLUS
 CN 1H-Pyrrolo[3,2-c]quinoline-1-carboxylic acid, 4,5-dihydro-5-methyl-4-oxo-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

L7 ANSWER 46 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

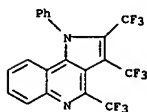


RE.CNT 17 THERE ARE 17 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 47 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 1997:392519 CAPLUS
 DN 127:108914
 TI Reactions involving fluoride ion. Part 42. Heterocyclic compounds from
 perfluoro-3,4-dimethylhexa-2,4-diene
 AU Chambers, Richard D.; Gray, William K.; Mullins, Steven J.; Korn, Stewart
 R.
 CS Department of Chemistry, Science Laboratories, University of Durham,
 Durham, DH1 3LE, UK
 SO Journal of the Chemical Society, Perkin Transactions 1: Organic and
 Bio-Organic Chemistry (1997), (10), 1457-1463
 CODEN: JCPRB4; ISSN: 0300-922X
 PB Royal Society of Chemistry
 DT Journal
 LA English
 GI

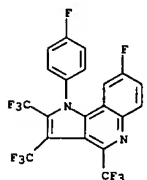
* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB Reactions of perfluoro-3,4-dimethylhexa-2,4-diene with primary aromatic
 amines XC6H4NH2 (X = H, 4-NMe2, 3-OMe, 4-Cl, etc.) give both pyrrole I
 and
 pyrroloquinoline II deriva., while ammonia gives dienes
 F3CC(NH2):C(CF3)C(CF3):C(CF3)NH2 and F3CC(NH2):C(CN)C(CN):C(CF3)NH2 as
 well as the novel pyrrole derivative III. Catechol leads to a
 benzodioxocine
 system IV and this can be epoxidized to a mixture of mono- and
 di-epoxides.
 Electrocyclization of IV occurs with UV irradiation, giving
 tricyclodecatetraene V.
 IT 87658-40-OP 192521-67-8P 192521-68-9P
 192521-69-OP 192521-70-3P 192521-71-4P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation of N- and O-containing heterocyclic compds. from
 perfluorodimethylhexadiene)
 RN 87658-40-0 CAPLUS
 CN 1H-Pyrrolo[3,2-c]quinoline, 1-phenyl-2,3,4-tris(trifluoromethyl)- (9CI)
 (CA INDEX NAME)

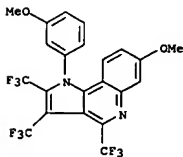


RN 192521-67-8 CAPLUS
 CN 1H-Pyrrolo[3,2-c]quinoline, 8-methoxy-1-(4-methoxyphenyl)-2,3,4-
 tris(trifluoromethyl)- (9CI) (CA INDEX NAME)

L7 ANSWER 47 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

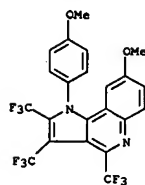


RN 192521-71-4 CAPLUS
 CN 1H-Pyrrolo[3,2-c]quinoline, 7-methoxy-1-(3-methoxyphenyl)-2,3,4-
 tris(trifluoromethyl)- (9CI) (CA INDEX NAME)

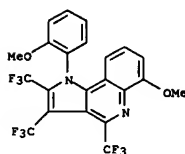


RE.CNT 19 THERE ARE 19 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

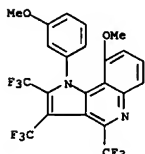
L7 ANSWER 47 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



RN 192521-68-9 CAPLUS
 CN 1H-Pyrrolo[3,2-c]quinoline, 6-methoxy-1-(2-methoxyphenyl)-2,3,4-
 tris(trifluoromethyl)- (9CI) (CA INDEX NAME)



RN 192521-69-0 CAPLUS
 CN 1H-Pyrrolo[3,2-c]quinoline, 9-methoxy-1-(3-methoxyphenyl)-2,3,4-
 tris(trifluoromethyl)- (9CI) (CA INDEX NAME)



RN 192521-70-3 CAPLUS
 CN 1H-Pyrrolo[3,2-c]quinoline, 8-fluoro-1-(4-fluorophenyl)-2,3,4-
 tris(trifluoromethyl)- (9CI) (CA INDEX NAME)

L7 ANSWER 48 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN

AN 1997:353959 CAPLUS
 DN 126:325547
 TI Method using 15-lipoxygenase inhibitors for treating and preventing
 inflammation and atherosclerosis
 IN Cornicelli, Joseph Anthony; Padia, Janak Khimchand; Tait, Bradley Dean;
 Trivedi, Bharat Kalidas
 PA Warner-Lambert Company, USA; Cornicelli, Joseph Anthony; Padia, Janak
 Khimchand; Tait, Bradley Dean; Trivedi, Bharat, Kalidas
 SO PCT Int. Appl., 43 pp.
 CODEN: PIXXD2
 DT Patent
 LA English
 FAN.CNT 2

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 9712613	A1	19970410	WO 1996-US14242	19960905

W: AU, CA, EE, JP, LT, LV, MX, NZ, SI, US
 RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT,

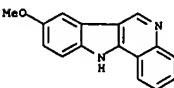
SE	NO.	KIND	DATE	NO.	DATE
AU	9669666	A1	19970428	AU 1996-69666	19960905
ZA	9608332	A	19970513	ZA 1996-8332	19961003
ZA	9608335	A	19970513	ZA 1996-8335	19961003
US	6001866	A	19991214	US 1998-51002	19980320
US	5972980	A	19991026	US 1999-295742	19990420
PRAI	US 1995-5201P	P	19951005		
WO	1996-US14242	W	19960905		

OS MARPAT 126:325547
 AB Inhibitors of 15-lipoxygenase (15-LO) (Markush included) are useful to
 treat and prevent inflammation or atherosclerosis. Preferred inhibitors
 have a ratio of 5-LO to 15-LO inhibitory activity of at least about 10 or
 more. The 15-lipoxygenase-inhibitory activity of a variety of compds. of
 the invention was determined. The antiatherosclerotic effect of
 6,11-dihydro[1]benzothiopyran[4,3-6]indole was evaluated.
 IT 155249-83-5

RL: BAC (Biological activity or effector, except adverse); BSU
 (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study);
 USES

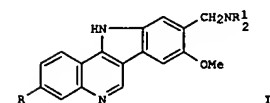
(Uses)
 (15-lipoxygenase inhibitors for treating and preventing inflammation
 and atherosclerosis)

RN 155249-83-5 CAPLUS
 CN 11H-Indolo[3,2-c]quinoline, 8-methoxy- (9CI) (CA INDEX NAME)

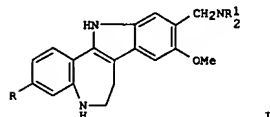


L7 ANSWER 48 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

L7 ANSWER 49 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 1997:98904 CAPLUS
 DN 126:199475
 TI Syntheses of some indolo[3,2-c]quinolines and [3,2-d]benzazepines
 AU Ibrahim, El-Sayed I.
 CS Chem. Dep., Suez Canal Univ., Ismailia, Egypt
 SO Heterocyclic Communications (1996), 2(6), 523-530
 CODEN: HCOMEX; ISSN: 0793-0283
 PB Freund
 DT Journal
 LA English
 GI



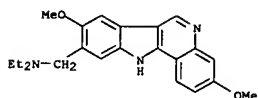
I



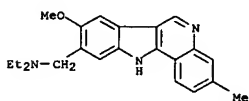
II

AB The title compds. I and II (R = OMe, Me; R' = Et, Me) were prepared by reaction between 5-hydrazino-2-methoxy-N,N-diethyl or -dimethylbenzylamines and either 7-substituted 1,2,3,4-tetrahydro-4-quinolones or 8-substituted 2,3,4,5-tetrahydrobenzazepine-5-ones.
 IT 187601-86-1P 187601-87-2P 187601-88-3P 187601-89-4P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation of indoloquinolines and -benzazepines)
 RN 187601-86-1 CAPLUS
 CN 11H-Indolo[3,2-c]quinoline-9-methanamine, N,N-diethyl-3,8-dimethoxy- (9CI)
 (CA INDEX NAME)

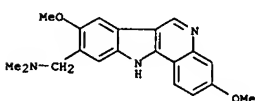
L7 ANSWER 49 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



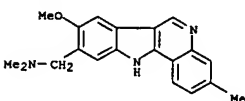
RN 187601-87-2 CAPLUS
 CN 11H-Indolo[3,2-c]quinoline-9-methanamine, N,N-diethyl-8-methoxy-3-methyl- (9CI) (CA INDEX NAME)



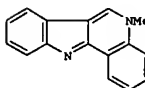
RN 187601-88-3 CAPLUS
 CN 11H-Indolo[3,2-c]quinoline-9-methanamine, 3,8-dimethoxy-N,N-dimethyl- (9CI) (CA INDEX NAME)



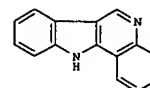
RN 187601-89-4 CAPLUS
 CN 11H-Indolo[3,2-c]quinoline-9-methanamine, 8-methoxy-N,N,3-trimethyl- (9CI) (CA INDEX NAME)



L7 ANSWER 50 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 1997:73619 CAPLUS
 DN 126:157678
 TI Synthesis of isocryptolepine, an alkaloid from *Cryptolepis sanguinolenta*
 AU Dubovitskii, S. V.; Radchenko, O. S.; Novikov, V. L.
 CS Far Eastern State Univ., Vladivostok, 690600, Russia
 SO Izvestiya Akademii Nauk, Seriya Khimicheskaya (1996), (11), 2797-2798
 CODEN: IASKEA
 PB Institut Organicheskoi Khimii im. N. D. Zelinskogo Rossiiskoi Akademii Nauk
 DT Journal
 LA Russian
 GI

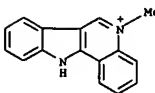


I



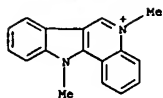
II

AB Isocryptolepine (I), an alkaloid recently isolated from the roots of *Cryptolepis sanguinolenta*, was synthesized by selective methylation at N-5 of 11H-indolo[3,2-c]quinoline (II) with excess of MeI in toluene.
 IT 180520-56-3P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
 (preparation and conversion to isocryptolepine)
 RN 180520-56-3 CAPLUS
 CN 11H-Indolo[3,2-c]quinolinium, 5-methyl-, iodide (9CI) (CA INDEX NAME)

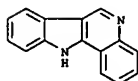
● I⁻

IT 186787-39-3P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation of)
 RN 186787-39-3 CAPLUS
 CN 11H-Indolo[3,2-c]quinolinium, 5,11-dimethyl-, iodide (9CI) (CA INDEX NAME)

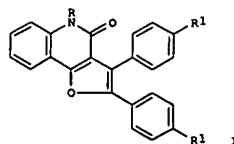
L7 ANSWER 50 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

● I⁻

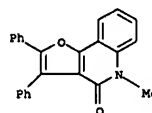
IT 239-09-8, 11H-Indolo[3,2-c]quinoline
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (regioselective methylation of)
 RN 239-09-8 CAPLUS
 CN 11H-Indolo[3,2-c]quinoline (6CI, 7CI, 8CI, 9CI) (CA INDEX NAME)



L7 ANSWER 51 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 1996:512486 CAPLUS
 DN 125:221743
 TI An interesting reaction of N-substituted-4-hydroxy-2-quinolone with benzoin
 AU Mulwad, V.V.; Suryanarayan, V.
 CS Department of Organic Chemistry, Institute of Science, Bombay, 400 032, India
 SO Indian Journal of Heterocyclic Chemistry (1996), 5(4), 321-322
 CODEN: IJCHEI; ISSN: 0971-1627
 PB Lucknow University, Dep. of Chemistry
 DT Journal
 LA English
 GI

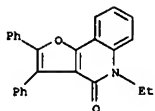


AB The condensation of 4-hydroxy-2-quinolones with benzoin and anisoin in presence of polyphosphoric acid gave
 2,3-diarylfuro[3,2-c]quinolin-4-ones
 I (R = Me, Et, Ph; R1 = H, OMe).
 IT 180783-78-2P 180783-80-6P 180783-82-6P
 180783-84-0P 180783-86-2P 180783-87-3P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation of furoquinolinones from benzoin and
 hydroxyquinolinones)
 RN 180783-78-2 CAPLUS
 CN Furo[3,2-c]quinolin-4(5H)-one, 5-methyl-2,3-diphenyl- (9CI) (CA INDEX NAME)

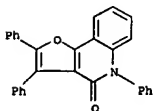


RN 180783-80-6 CAPLUS
 CN Furo[3,2-c]quinolin-4(5H)-one, 5-ethyl-2,3-diphenyl- (9CI) (CA INDEX NAME)

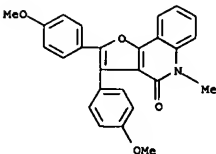
L7 ANSWER 51 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



RN 180783-82-8 CAPLUS
 CN Furo[3,2-c]quinolin-4(5H)-one, 2,3,5-triphenyl- (9CI) (CA INDEX NAME)

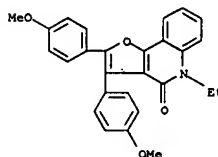


RN 180783-84-0 CAPLUS
 CN Furo[3,2-c]quinolin-4(5H)-one, 2,3-bis(4-methoxyphenyl)-5-methyl- (9CI)
 (CA INDEX NAME)

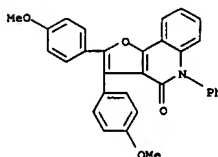


RN 180783-86-2 CAPLUS
 CN Furo[3,2-c]quinolin-4(5H)-one, 5-ethyl-2,3-bis(4-methoxyphenyl)- (9CI)
 (CA INDEX NAME)

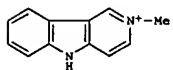
L7 ANSWER 51 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



RN 180783-87-3 CAPLUS
 CN Furo[3,2-c]quinolin-4(5H)-one, 2,3-bis(4-methoxyphenyl)-5-phenyl- (9CI)
 (CA INDEX NAME)

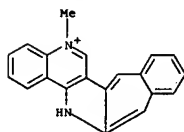


L7 ANSWER 52 OF 273 CAPLUS COPYRIGHT 2005 ACS ON STN
 AN 1996:440846 CAPLUS
 DN 125:195462
 TI Synthesis and DNA Binding Properties of γ -Carbolinium Derivatives
 and Benzologues
 AU Molina, Andres; Vaquero, Juan J.; Garcia-Navio, Jose L.; Alvarez-Builla,
 Julio; de Pascual-Teresa, Beatriz; Gago, Federico; Rodrigo, Maria M.;
 Ballesteros, Milagros
 CS Departamento de Química Organica, Universidad de Alcala de Henares,
 Alcala
 de Henares, 28871, Spain
 SO Journal of Organic Chemistry (1996), 61(16), 5587-5599
 CODEN: JOCEAH; ISSN: 0022-3263
 PB American Chemical Society
 DT Journal
 LA English
 GI

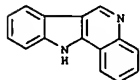


AB The 5H-pyrido[4,3-b]indole, 11H-indolo[3,2-c]quinoline,
 5H-benzo(f)pyrido[4,3-b]indole, and 13H-benz[5,6]indolo[3,2-c]quinoline
 heteroarom. nuclei have been synthesized by the Graebe-Ullmann method by
 classical heating or under microwave irradiation. These tri-, tetra-, and
 pentacyclic compds. were transformed into the corresponding cationic
 deriva., e.g. I, by N-alkylation, and the DNA-binding properties of the
 resulting cationic systems were examined using UV-vis spectroscopy,
 viscometric detns., and mol. modeling techniques. The tetracyclic
 cations
 were transformed into bis-salts by means of a di-Et bispiperidine rigid
 chain and a more flexible polyamide linker, but the low solubility of
 these
 bis-salts made the study of their bisintercalating properties difficult.
 IT 180520-56-3P 180520-57-4P 180520-58-5P
 180520-60-9P
 RL: BAC (Biological activity or effector, except adverse); BSU
 (Biological
 study, unclassified); SPN (Synthetic preparation); BIOL (Biological
 study); PREP (Preparation)
 (synthesis and DNA binding properties of γ -carbolinium deriva.
 and benzologues)
 RN 180520-56-3 CAPLUS
 CN 11H-Indolo[3,2-c]quinolinium, 5-methyl-, iodide (9CI) (CA INDEX NAME)

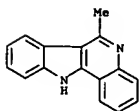
L7 ANSWER 52 OF 273 CAPLUS COPYRIGHT 2005 ACS ON STN (Continued)



● I-
 IT 239-09-8P, 11H-Indolo[3,2-c]quinoline 4295-26-7P
 4295-33-4P 149429-22-1P 149429-24-3P,
 13H-Benz[5,6]indolo[3,2-c]quinoline 149429-25-4P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
 (Reactant or reagent)
 (synthesis and DNA binding properties of γ -carbolinium deriva.
 and benzologues)
 RN 239-09-8 CAPLUS
 CN 11H-Indolo[3,2-c]quinoline (6CI, 7CI, 8CI, 9CI) (CA INDEX NAME)

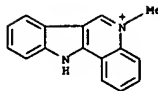


RN 4295-28-7 CAPLUS
 CN 11H-Indolo[3,2-c]quinoline, 6-methyl- (7CI, 8CI, 9CI) (CA INDEX NAME)



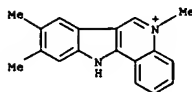
RN 4295-33-4 CAPLUS
 CN 11H-Indolo[3,2-c]quinoline, 8,9-dimethyl- (7CI, 8CI, 9CI) (CA INDEX NAME)

L7 ANSWER 52 OF 273 CAPLUS COPYRIGHT 2005 ACS ON STN (Continued)



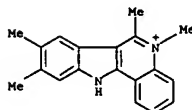
● I-

RN 180520-57-4 CAPLUS
 CN 11H-Indolo[3,2-c]quinolinium, 5,8,9-trimethyl-, iodide (9CI) (CA INDEX NAME)



● I-

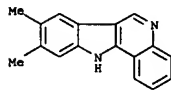
RN 180520-58-5 CAPLUS
 CN 11H-Indolo[3,2-c]quinolinium, 5,6,8,9-tetramethyl-, iodide (9CI) (CA INDEX NAME)



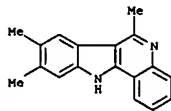
● I-

RN 180520-60-9 CAPLUS
 CN 13H-Benz[5,6]indolo[3,2-c]quinolinium, 5-methyl-, iodide (9CI) (CA INDEX NAME)

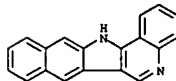
L7 ANSWER 52 OF 273 CAPLUS COPYRIGHT 2005 ACS ON STN (Continued)



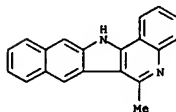
RN 149429-22-1 CAPLUS
 CN 11H-Indolo[3,2-c]quinoline, 6,8,9-trimethyl- (9CI) (CA INDEX NAME)



RN 149429-24-3 CAPLUS
 CN 13H-Benz[5,6]indolo[3,2-c]quinoline (9CI) (CA INDEX NAME)

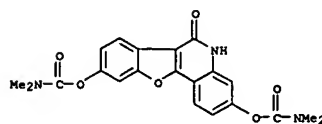


RN 149429-25-4 CAPLUS
 CN 13H-Benz[5,6]indolo[3,2-c]quinoline, 6-methyl- (9CI) (CA INDEX NAME)



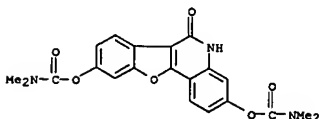
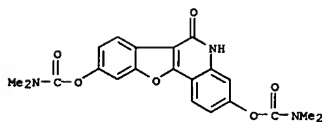
L7 ANSWER 53 OF 273 CAPLUS COPYRIGHT 2005 ACS ON STN
 AN 1996:51744 CAPLUS
 DN 124:135660
 TI Effect of KCA-098 on the function of osteoblast-like cells and the formation of TRAP-positive multinucleated cells in a mouse bone marrow cell population
 AU Kawashima, Kohtaro; Inoue, Takeshi; Tsutsumi, Naoyuki; Endo, Hiroyoshi
 CS Faculty Pharmaceutical Sciences, Teikyo Univ., Kanagawa, 199-01, Japan
 SO Biochemical Pharmacology (1996), 51(2), 133-9
 CODEN: BCPA6; ISSN: 0006-2952
 PB Elsevier
 DT Journal
 LA English
 AB KCA-098
 (3,9-bis-(N,N-dimethylcarbamoyloxy)-5H-benzofuro[3,2-c]quinoline-6-one), an analog of coumestrol (a naturally occurring weak phytoestrogen), dose-dependently increased alkaline phosphatase activity of osteoblastic ROS 17/2.8 cells and freshly-isolated osteoblasts from neonatal mouse calvaria, and reduced cell proliferation. In addition, KCA-098 increased the synthesis of collagenase-digestible protein (CDP) of ROS 17/2.8 cells.
 On the other hand, KCA-098 had no effect on the basal synthesis of osteocalcin but reduced the 1 α ,25-dihydroxyvitamin D₃ (1 α ,25(OH)₂D₃)-induced increase on osteocalcin synthesized by ROS 17/2.8 cells. Therefore, KCA-098 had a bidirectional effect on the differentiation of osteoblasts (i.e., stimulating both alkaline phosphatase activity and synthesis of CDP and inhibiting osteocalcin synthesis). However, as KCA-098 stimulated the mineralization of chick embryonic bone in organ culture and recovered the bone d. reduced by ovariectomy of rats, it would serve overall to stimulate the differentiation of osteoblasts. On the other hand, KCA-098 inhibited the formation of tartrate-resistant, acid phosphate-pos. multinucleated cells (TRAP(+)) induced by 1 α ,15(OH)₂D₃, parathyroid hormone (PTH), and prostaglandin E₂ (PGE₂) in cultures of mouse bone marrow cells, showing that it inhibits the formation of osteoclast-like cells. Coumestrol and 17 β -estradiol had no effect on the proliferation and alkaline phosphatase activity of ROS 17/2.8 cells. They did, however, dose-dependently inhibit osteoclast-like cell formation as well as KCA-098 did, indicating that the main action of coumestrol and 17 β -estradiol on bone tissue is the inhibition of bone resorption.
 IT 129794-24-7, KCA-098
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (effect of KCA-098 on the function of osteoblast-like cells and the formation of TRAP-pos. multinucleated cells in a mouse bone marrow cell population)
 RN 129794-24-7 CAPLUS
 CN Carbanic acid, dimethyl-, 5,6-dihydro-6-oxobenzofuro[3,2-c]quinoline-3,9-

L7 ANSWER 53 OF 273 CAPLUS COPYRIGHT 2005 ACS ON STN (Continued)
 diyl ester (9CI) (CA INDEX NAME)



L7 ANSWER 54 OF 273 CAPLUS COPYRIGHT 2005 ACS ON STN
 AN 1996:27556 CAPLUS
 DN 124:189937
 TI Polymorphism of 3,9-bis-(N,N-dimethylcarbamoyloxy)-5H-benzofuro[3,2-c]quinolin-6-one (KCA-098), a new benzofuroquinoline derivative
 AU Yamada, Tatsuhiko; Ikegami, Kazuhiko; Toda, Michio; Saito, Noriyasu; Iizuka, Kinji; Otagiri, Masaki
 CS Pharmaceutical Lab., Kissei Pharmaceutical Co., Ltd., Nagano, 399, Japan
 SO Yakugaku Zasshi (1995), 115(12), 978-84
 CODEN: YKKZAJ; ISSN: 0031-6903
 PB Pharmaceutical Society of Japan
 DT Journal
 LA Japanese
 AB Physicochem. properties of polymorphism of 3,9-bis-(N,N-dimethylcarbamoyloxy)-5H-benzofuro[3,2-c]quinolin-6-one (KCA-098) were studied. The existence of four crystalline forms (designated as hydrate, I, II and III) was confirmed by x-ray powder diffraction, IR spectroscopy and thermal anal. (DSC and TGA). The hydrate is a monohydrate by elemental anal. and H₂O content measurement. DSC measurement found that the hydrate was transformed to form III at .apprx.93°, and then to form II at .apprx.152°, and finally to form I at .apprx.260°. However, when suspended in H₂O the forms I, II and III were transformed into the hydrate. The transition rate from form III to hydrate was higher than those from form II to hydrate and from form I to hydrate. Form III is a metastable form showing higher solubility than form I, II and hydrate.
 IT 174153-85-6
 RL: PEP (Physical, engineering or chemical process); PROC (Process) (dehydration of)
 RN 174153-85-6 CAPLUS
 CN Carbanic acid, dimethyl-, 5,6-dihydro-6-oxobenzofuro[3,2-c]quinoline-3,9-diyl ester, monohydrate (9CI) (CA INDEX NAME)

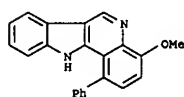
L7 ANSWER 54 OF 273 CAPLUS COPYRIGHT 2005 ACS ON STN (Continued)



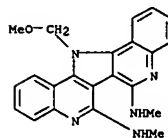
● H₂O

IT 129794-24-7, KCA 098
 RL: PEP (Physical, engineering or chemical process); PRP (Properties); PROC (Process)
 (polymorphism and hydration of)
 RN 129794-24-7 CAPLUS
 CN Carbanic acid, dimethyl-, 5,6-dihydro-6-oxobenzofuro[3,2-c]quinoline-3,9-diyl ester (9CI) (CA INDEX NAME)

L7 ANSWER 55 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 1995:1000584 CAPLUS
 DN 124:176020
 TI Substituted 8-methoxyquinolines: regioselective bromination, coupling reactions and cyclization to an 11H-indolo[3,2-c]quinoline
 AU Trecourt, Francois; Mongin, Florence; Mallet, Marc; Queguiner, Guy
 CS Lab. Chimie Organique Fine Heterocyclique, Inst. National Sciences Appliquées Rouen, Mont-Saint-Aignan, 76131, Fr.
 SO Synthetic Communications (1995), 25(24), 4011-24
 CODEN: SYNCAY; ISSN: 0039-7911
 PB Dekker
 DT Journal
 LA English
 OS CASREACT 124:176020
 AB 5,7-Disubstituted 8-methoxyquinolines were brominated at C-3 position. The palladium-catalyzed cross-coupling of the resulting 3-bromoquinolines with phenylboric acids gave corresponding 3-arylquinolines from which a substituted 11H-indolo[3,2-c]quinoline could be synthesized. Bromination of 7-bromo-8-methoxy-5-phenylquinoline gave 3,7-dibromo-8-methoxy-5-phenylquinoline. The coupling of the latter with gave N-[2-(8-methoxy-5-phenyl-3-quinolinyl)phenyl]-2,2-dimethylpropanamide. The cyclization of the latter gave 4-methoxy-1-phenyl-11H-indolo[3,2-c]quinoline.
 IT 173729-03-8P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation of indolo[3,2-c]quinoline by regioselective bromination and coupling and cyclization of methoxyquinoline)
 RN 173729-03-8 CAPLUS
 CN 11H-Indolo[3,2-c]quinoline, 4-methoxy-1-phenyl- (9CI) (CA INDEX NAME)

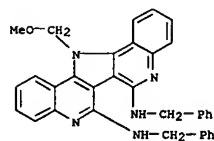


L7 ANSWER 56 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 1995:908973 CAPLUS
 DN 124:117263
 TI Iminophosphorane-mediated bispyrido annulation onto five-membered rings. X-ray crystal structure of 6,7-dibenzylamino-13-methoxymethyl-13H-di-quinolo[4,3-b:3',4'-d]pyrrole-acetonitrile complex
 AU Molina, Pedro; Alajarin, Mateo; Vidal, Angel
 CS Dep. Quim. Org., Fac. Quim., Univ. Murcia, Murcia, E-30071, Spain
 SO Tetrahedron (1995), 51(44), 12127-42
 CODEN: TETRAB; ISSN: 0040-4020
 PB Elsevier
 DT Journal
 LA English
 OS CASREACT 124:117263
 AB Bispyrido annulation reaction onto a preformed five-membered heterocycle was achieved by a tandem aza-Wittig/electrocyclic ring closure method. The method allows the one-step formation of diquinopyrroles, dipyrrolopyrroles, furodipyrroles and thienodipyrroles. The crystal and mol. structure of the 6,7-dibenzylamino-13-methoxymethyl-13H-di-quinolo[4,3-b:3',4'-d]pyrrole-acetonitrile complex has been solved by X-ray anal.
 IT 173162-70-4P 173162-71-5P 173162-72-6P 173162-73-7P 173162-94-2P 173162-95-3P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (iminophosphorane-mediated bispyrido annulation onto five-membered rings)
 RN 173162-70-4 CAPLUS
 CN 13H-Pyrrolo[3,2-c:4,5-c']diquinoline-6,7-diamine, 13-(methoxymethoxy)-N,N'-dimethyl- (9CI) (CA INDEX NAME)

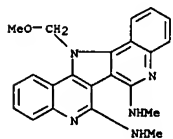


RN 173162-71-5 CAPLUS
 CN 13H-Pyrrolo[3,2-c:4,5-c']diquinoline-6,7-diamine, 13-(methoxymethoxy)-N,N'-bis(phenylmethyl)- (9CI) (CA INDEX NAME)

L7 ANSWER 56 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

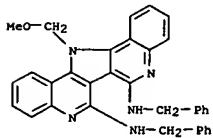


RN 173162-72-6 CAPLUS
 CN 13H-Pyrrolo[3,2-c:4,5-c']diquinoline-6,7-diamine, 13-(methoxymethoxy)-N,N'-dimethyl-, monohydrobromide (9CI) (CA INDEX NAME)



● HBr

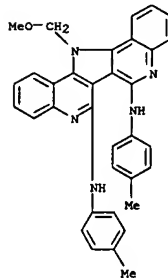
RN 173162-73-7 CAPLUS
 CN 13H-Pyrrolo[3,2-c:4,5-c']diquinoline-6,7-diamine, 13-(methoxymethoxy)-N,N'-bis(phenylmethyl)-, monohydrobromide (9CI) (CA INDEX NAME)



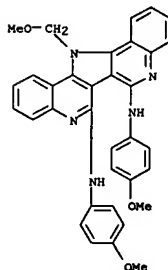
● HBr

RN 173162-94-2 CAPLUS
 CN 13H-Pyrrolo[3,2-c:4,5-c']diquinoline-6,7-diamine, 13-(methoxymethyl)-N,N'-

L7 ANSWER 56 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



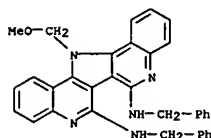
RN 173162-95-3 CAPLUS
 CN 13H-Pyrrolo[3,2-c:4,5-c']diquinoline-6,7-diamine, 13-(methoxymethyl)-N,N'-bis(4-methoxyphenyl)- (9CI) (CA INDEX NAME)



IT 173162-96-4P
 RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
 (iminophosphorane-mediated bispyrido annulation onto five-membered rings and structure of diquinopyrrole-acetonitrile complex)
 RN 173162-96-4 CAPLUS
 CN 13H-Pyrrolo[3,2-c:4,5-c']diquinoline-6,7-diamine, 13-(methoxymethyl)-N,N'-bis(phenylmethyl)-, compd. with acetonitrile (1:1) (9CI) (CA INDEX NAME)

L7 ANSWER 56 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

CM 1

CRN 173162-71-5
CMF C34 H29 N5 O

CM 2

CRN 75-05-8
CMF C2 H3 N

L7 ANSWER 57 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN

AN 1995:825864 CAPLUS

DN 124:29634

TI Aryl radical cyclization on to a pyrrole nucleus

AU Jones, Keith; Ho, Tim C. T.; Wilkinson, James

CS Dep. Chem., King's College London, Strand, London, WC2R 2LS, UK

SO Tetrahedron Letters (1995), 36(37), 6743-4

CODEN: TELEAY; ISSN: 0040-4039

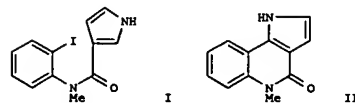
PB Elsevier

DT Journal

LA English

OS CASREACT 124:29634

GI



AB O-Iodoanilides based on 2- and 3- carboxypyrroles are prepared and their cyclisation via the derived aryl radical is discussed. E.g., cyclization of pyrrole I gave 43l pyrroloquinolone II.

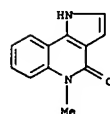
IT 85157-98-8P 171776-97-9P

RL: SPN (Synthetic preparation); PREP (Preparation)

RL: (aryl radical cyclization on to a pyrrole nucleus)

RN 85157-98-8 CAPLUS

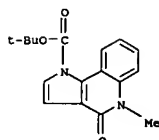
CN 4H-Pyrrolo[3,2-c]quinolin-4-one, 1,5-dihydro-5-methyl- (9CI) (CA INDEX NAME)



RN 171776-97-9 CAPLUS

CN 1H-Pyrrolo[3,2-c]quinoline-1-carboxylic acid,
4,5-dihydro-5-methyl-4-oxo-,
1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

L7 ANSWER 57 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



L7 ANSWER 58 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN

AN 1995:676358 CAPLUS

DN 123:74857

TI A comparative study on the inhibitory effects of 3,9-bis(N,N-dimethylcarbamoyloxy)-5H-benzofuro[3,2-c]quinoline-6-one (KCA-098) and calcitonin on bone resorption in organ culture

AU Tsutsumi, Naoyuki; Kawashima, Kohtaro; Miyata, Hiroshi; Endo, Hiroyoshi; Nakazawa, Masayuki

CS Central Res. Labs., Kissei Pharmaceutical Co., Ltd., Nagano, 399-83, Japan

SO Oyo Yakuri (1995), 50(1), 79-85

CODEN: OYVAA2; ISSN: 0300-8533

PB Oyo Yakuri Kenkyukai

DT Journal

LA English

AB The authors comparatively studied the effects of 3,9-bis(N,N-dimethylcarbamoyloxy)-5H-benzofuro[3,2-c]quinoline-6-one (KCA-098) and calcitonin on bone resorption of both fetal rat and embryonic chick bones in organ culture. KCA-098 continuously inhibited parathyroid hormone (PTH)-induced bone resorption of both rat and chick bones in a concentration-dependent manner, whereas it did not influence basal bone resorption. Although calcitonin (10⁻¹⁰ to 10⁻⁶ M) inhibited PTH-induced bone resorption of the rat bone, the inhibitory action was transient, even in the continuous presence of the hormone in the medium. Calcitonin, even at a concentration of 10⁻⁶ M, did not inhibit PTH-induced bone resorption of the chick bone. Calcitonin did not inhibit basal bone resorption of the both rat and chick bones. The inhibitory effect of a combination of KCA-098 (2+10⁻⁶ M) with calcitonin (10⁻⁷ M) on PTH-induced bone resorption of the rat bone was synergistic. However, the combination of the two agents did not show the synergism in the chick bone; calcitonin did not synergize the effect of KCA-098 at all. These results indicate that KCA-098 has, at least in part, some different mechanism(s) with regard to the inhibition of bone resorption than calcitonin.

IT 129794-24-7, KCA 098
RL: BAC (Biological activity or effector, except adverse); BSU

(Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study);

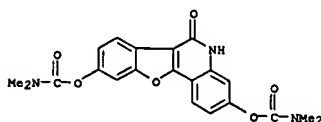
USES

(Uses)

(a comparative study on inhibitory effects of KCA-098 and calcitonin on bone resorption in organ culture)

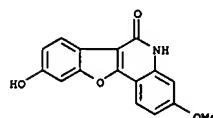
RN 129794-24-7 CAPLUS

CN Carbamic acid, dimethyl-, 5,6-dihydro-6-oxobenzofuro[3,2-c]quinoline-3,9-diyl ester (9CI) (CA INDEX NAME)

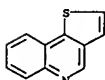


L7 ANSWER 58 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

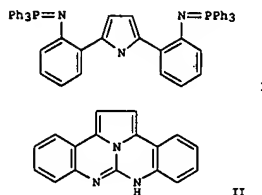
L7 ANSWER 59 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 1995:662256 CAPLUS
 DN 123:143672
 TI Drug for osteoporosis: improved synthesis of important intermediates of quinolinone derivatives
 AU Duan, Wenhui; Xu, Mingxia
 CS Sch. Pharmacy, West China Univ. Med. Sci., Chengdu, 610041, Peop. Rep. China
 SO Huaxi Yaoxue Zazhi (1995), 10(2), 103-5
 CODEN: HYZAE2; ISSN: 1006-0103
 PB Huaxi Yike Daxue Yaoxueyuan
 DT Journal
 LA Chinese
 AB Synthesis of 2,4-dimethoxyphenylacetic acid, di-Et 4-methoxyphenylmalonate, and 3,9-dihydroxybenzofuranoquinolinone were reported. E.g., oxidation of 2,4-dimethoxyacetophenone with S and morpholine gave 50% 2,4-dimethoxyphenylacetic acid.
 IT 166403-09-4P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (synthesis of intermediates of quinolinone derivs.)
 RN 166403-09-4 CAPLUS
 CN Benzofuro[3,2-c]quinolin-6(5H)-one, 9-hydroxy-3-methoxy- (SCI) (CA INDEX NAME)



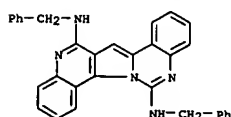
L7 ANSWER 60 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 1995:628107 CAPLUS
 DN 123:82711
 TI Structural chemistry of polycyclic heteroaromatic compounds. Part 6. Photoelectron spectra and electronic structures of polycyclic heptarenes: thienoquinolines and thienoisquinolines
 AU Marzinzik, A. L.; Rademacher, P.
 CS Institute of Organic Chemistry, University of Essen, Essen, D-45117, Germany
 SO Journal of Molecular Structure (1995), 351, 107-17
 CODEN: JMOSB4; ISSN: 0022-2860
 PB Elsevier
 DT Journal
 LA English
 AB The He(I) photoelectron spectra of 13 isomeric thienoquinolines and thienoisquinolines and the π -isoelectronic naphthothiophenes are reported and discussed. The assignments for the latter compds. are made by using the sulfur double-bond model taking phenanthrene (I) as the reference
 mol. The shape and the energies of the π MOs of thienoquinolines and thienoisquinolines can be estimated from those of I by first-order perturbation theory. This concept is very useful for distinguishing isomeric thienoquinolines and thienoisquinolines.
 IT 234-43-5, Thieno[3,2-c]quinoline
 RL: PRP (Properties)
 (photoelectron spectra and electronic structures of thienoquinolines, thienoisquinolines, and naphthothiophenes)
 RN 234-43-5 CAPLUS
 CN Thieno[3,2-c]quinoline (SCI, 9CI) (CA INDEX NAME)



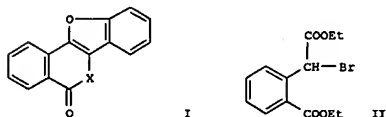
L7 ANSWER 61 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 1995:556578 CAPLUS
 DN 123:256660
 TI Preparation of [5,6,6] tricyclic guanidines from C,C-bis(iminophosphoranes)
 AU Molina, Pedro; Alajarin, Mateo; Vidal, Angel
 CS Fac. de Quimica, Univ. Murcia, Murcia, E-30071, Spain
 SO Tetrahedron (1995), 51(18), 5351-60
 CODEN: TETRAH; ISSN: 0040-4020
 PB Elsevier
 DT Journal
 LA English
 GI



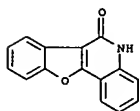
AB Aza Wittig-type reaction of N,N'-bis(triphenylphosphoranylidene)-2,2'-(1H-pyrrolo-2,5-diyl)bis(benzeneamine) (I), the C,C-bis(iminophosphorane) derived from 2,5-bis(o-aminophenyl)pyrrole, with two equivalent of aryl isocyanates gave tricyclic guanidines. These guanidines which underwent elimination of the corresponding diarylcarbodiimide by thermal treatment to give a parent [5,6,6]tricyclic guanidine II.
 IT 169139-44-0P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (Preparation of tricyclic guanidines from bis(iminophosphoranes))
 RN 169139-44-0 CAPLUS
 CN Quino[3',4':4,5]pyrrolo[1,2-c]quinazoline-6,13-diamine, N,N'-bis(phenylmethyl)- (SCI) (CA INDEX NAME)



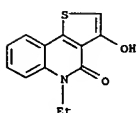
L7 ANSWER 62 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 1995:548835 CAPLUS
 DN 123:32934
 TI The synthesis of benzofuroquinolines. IX. A benzofuroisquinolinone and a benzofuroisocoumarin
 AU Yamaguchi, Seiji; Uchiuzoh, Yasuo; Sanada, Kunio
 CS Faculty of Science, Toyama University, Toyama, 930, Japan
 SO Journal of Heterocyclic Chemistry (1995), 32(2), 419-23
 CODEN: JHCTAD; ISSN: 0022-152X
 PB HeteroCorporation
 DT Journal
 LA English
 OS CASREACT 123:32934
 GI



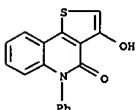
AB Some procedures for a benzofuroisquinolinone I [X = NH] were studied. Its O-analogous benzofuroisocoumarin I [X = O] was synthesized from Me salicylate with di-Et α -bromomethylphthalate (II). And, the benzofuroisquinolinone I [X = NH] was obtained by treating I [X = O] with ammonia gas in a sealed tube.
 IT 57046-70-5P, Benzofuro[3,2-c]quinolin-6(5H)-one
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation of a benzofuroisquinolinone and a benzofuroisocoumarin)
 RN 57046-70-5 CAPLUS
 CN Benzofuro[3,2-c]quinolin-6(5H)-one (9CI) (CA INDEX NAME)



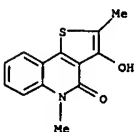
L7 ANSWER 63 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)
 RN 166191-79-3 CAPLUS
 CN Thieno[3,2-c]quinolin-4(5H)-one, 5-ethyl-3-hydroxy- (9CI) (CA INDEX NAME)



RN 166191-80-6 CAPLUS
 CN Thieno[3,2-c]quinolin-4(5H)-one, 3-hydroxy-5-phenyl- (9CI) (CA INDEX NAME)

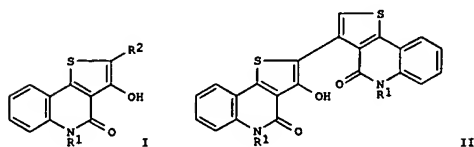


IT 166191-81-7P 166191-82-8P 166191-83-9P
 166191-84-0P 166191-85-1P 166191-86-2P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation of hydroxythienoquinolinones)
 RN 166191-81-7 CAPLUS
 CN Thieno[3,2-c]quinolin-4(5H)-one, 3-hydroxy-2,5-dimethyl- (9CI) (CA INDEX NAME)

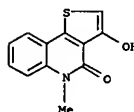


RN 166191-82-8 CAPLUS
 CN Thieno[3,2-c]quinolin-4(5H)-one, 5-ethyl-3-hydroxy-2-methyl- (9CI) (CA INDEX NAME)

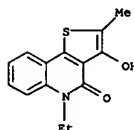
L7 ANSWER 63 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 1995:537252 CAPLUS
 DN 123:111894
 TI A facile synthesis of 3-hydroxythieno[3,2-c]quinolin-4(5H)-ones
 AU Gupta, M. C. L. N.; Darbarwar, Malleswar
 CS Dep. Chem., Osmania Univ., Hyderabad, 500 007, India
 SO Indian Journal of Chemistry, Section B: Organic Chemistry Including Medicinal Chemistry (1995), 34B(5), 432-5
 CODEN: IJSDDB; ISSN: 0376-4699
 PB Publications & Information Directorate, CSIR
 DT Journal
 LA English
 GI



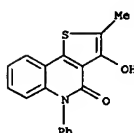
AB Reaction of 4-chloroquinolin-2(1H)-ones with 2-mercaptoacetic and -propionic acid in the presence of base furnishes 2-[(1,2-dihydro-2-oxo-4-quinolinyl)thio]acetic and -propionic acids, which, on cyclodehydration in polyphosphoric acid, afford the title compds. (I; R1 = Me, Et, Ph; R2 = H, Me). Aldol-type condensation products (II) are formed from I on standing in aqueous acid medium.
 IT 166191-78-2P 166191-79-3P 166191-80-6P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
 (preparation of hydroxythienoquinolinones)
 RN 166191-78-2 CAPLUS
 CN Thieno[3,2-c]quinolin-4(5H)-one, 3-hydroxy-5-methyl- (9CI) (CA INDEX NAME)



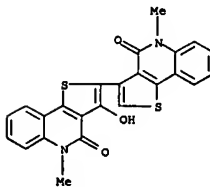
L7 ANSWER 63 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



RN 166191-83-9 CAPLUS
 CN Thieno[3,2-c]quinolin-4(5H)-one, 3-hydroxy-2-methyl-5-phenyl- (9CI) (CA INDEX NAME)

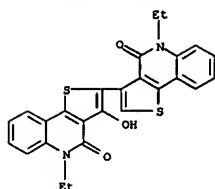


RN 166191-84-0 CAPLUS
 CN [2,3'-Bithieno[3,2-c]quinoline]-4,4' (5H,5'H)-dione, 3-hydroxy-5,5'-dimethyl- (9CI) (CA INDEX NAME)

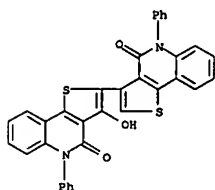


RN 166191-85-1 CAPLUS
 CN [2,3'-Bithieno[3,2-c]quinoline]-4,4' (5H,5'H)-dione, 5,5'-diethyl-3-hydroxy- (9CI) (CA INDEX NAME)

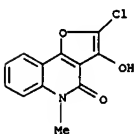
L7 ANSWER 63 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



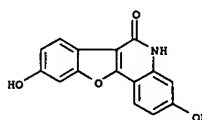
RN 166191-86-2 CAPLUS
 CN [2,3'-Bithieno[3,2-c]quinoline]-4,4'-(5H,5'H)-dione, 3-hydroxy-5,5'-diphenyl- (9CI) (CA INDEX NAME)



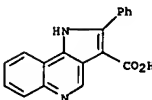
L7 ANSWER 65 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 1995:402284 CAPLUS
 DN 123:143663
 TI Synthesis of some heterocyclic rings as substituents to quinolone moiety
 AU Ibrahim, S. S.; Abdel-Halim, A. M.; Ismail, M. M.; Othman, E. S.
 CS Faculty Education, Ain-Shams University, Cairo, Egypt
 SO Indian Journal of Heterocyclic Chemistry (1994), 4(2), 125-30
 CODEN: IJCHEI; ISSN: 0971-1627
 DT Journal
 LA English
 AB 4-Hydroxy-1-methyl-3-(pentane-1',3'-dion-1'-yl)-2(1H)-quinolone (I) and 3-ethoxycarbonylacetyl-4-hydroxy-1-methyl-2(1H)-quinolone (II) have been synthesized and reacted with some amines, hydrazines, and diamines affording new substituted quinolones. The reactions of sulfonyl chloride, bromine, p-methylbenzenediazonium chloride, and sodium hydroxide solution on I and/or II have been also studied.
 IT 166520-42-9P
 RL: SPN (Synthetic preparation); PREP (Preparation) (synthesis of quinolone derivs.)
 RN 166520-42-9 CAPLUS
 CN Furo[3,2-c]quinolin-4(5H)-one, 2-chloro-3-hydroxy-5-methyl- (9CI) (CA INDEX NAME)



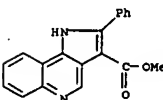
L7 ANSWER 64 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 1995:405479 CAPLUS
 DN 122:256050
 TI Effects of KCA-012 on bone metabolism in organ culture
 AU Tsutsumi, Naoyuki; Kawashima, Kohtaro; Nagata, Hideo; Ujii, Arai; Endo, Hiroyoshi
 CS Central Res. Lab., Kissei Pharmaceut. Co., Ltd., Nagano, 399-83, Japan
 SO Japanese Journal of Pharmacology (1993), 67(2), 169-71
 CODEN: JPPAAZ; ISSN: 0021-5198
 PB Japanese Pharmacological Society
 DT Journal
 LA English
 AB 3,9-Dihydroxy-5H-benzofuro[3,2-c]quinoline-6-one (KCA-012), the chemical structure of which is closely similar to that of the phytoestrogen coumestrol, inhibited parathyroid hormone-, 1α,25-dihydroxyvitamin D3- and prostaglandin E2-induced bone resorption of cultured fetal rat bones. KCA-012 also increased the calcium content of 9-day chick embryonic femur cultured in vitro. KCA-012 did not show any estrogenic activity as determined by an increase in the uterine weight of ovariectomized rats, whereas coumestrol did. These results indicate that KCA-012 has no estrogenic activity and has unique effects of inhibiting bone resorption and stimulating bone mineralization.
 IT 92741-84-9, KCA 012
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (KCA-012 effect on bone metabolism)
 RN 92741-84-9 CAPLUS
 CN Benzofuro[3,2-c]quinolin-6(5H)-one, 3,9-dihydroxy- (9CI) (CA INDEX NAME)



L7 ANSWER 66 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 1995:214971 CAPLUS
 DN 122:45667
 TI Comparison of a new class of pyrrole containing benzodiazepine ligands to the pyrazoloquinolinones CGS 9896, 9895, and 8216
 AU Schove, Laura T.; Perez, Juan J.; Maguire, Patricia A.; Loew, Gilda H.
 CS Molecular Research Institute, Palo Alto, CA, 94304, USA
 SO Medicinal Chemistry Research (1994), 4(5), 307-14
 CODEN: MCREEB; ISSN: 1054-2523
 PB Birkhauser
 DT Journal
 LA English
 AB Four pyrazoloquinolinone compds., variations of known high affinity ligands for the GABA/Benzodiazepine receptors (BDZRs), were synthesized and their affinities for BDZRs in cerebellum and spinal cord measured and compared to the parent compds., CGS 8216, CGS 9895, and CGS 9896. Using the techniques of computational chemical, specific properties of both types of compds. were calculated and evaluated for the extent to which they fulfill the min. postulated requirements for recognition of a cerebellum, "Type I", BDZr embodied in the authors current three dimensional pharmacophore. Addnl. properties were also calculated and examined as possible further determinants of recognition of the receptor subtype.
 IT 160090-82-4 160090-83-5 160090-84-6
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study) (comparison of new class of pyrrole containing GABA/Benzodiazepine receptor ligands to pyrazoloquinolinones in relation to pharmacophore)
 RN 160090-82-4 CAPLUS
 CN 1H-Pyrrolo[3,2-c]quinoline-3-carboxylic acid, 2-phenyl- (9CI) (CA INDEX NAME)

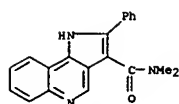


RN 160090-83-5 CAPLUS
 CN 1H-Pyrrolo[3,2-c]quinoline-3-carboxylic acid, 2-phenyl-, methyl ester (9CI) (CA INDEX NAME)

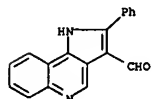


RN 160090-84-6 CAPLUS
 CN 1H-Pyrrolo[3,2-c]quinoline-3-carboxamide, N,N-dimethyl-2-phenyl- (9CI) (CA INDEX NAME)

L7 ANSWER 66 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



IT 143661-29-4P
 RL: BAC (Biological activity or effector, except adverse); BSU
 (Biological study, unclassified); PRP (Properties); SPN (Synthetic preparation); BIOL
 (Biological study); PREP (Preparation)
 (comparison of new class of pyrrole containing GABA/Benzodiazepine
 receptor ligands to pyrazoloquinolinones in relation to pharmacophore)
 RN 143661-29-4 CAPLUS
 CN 1H-Pyrrolo[3,2-c]quinoline-3-carboxaldehyde, 2-phenyl- (9CI) (CA INDEX
 NAME)



L7 ANSWER 68 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN

AN 1994:621877 CAPLUS

DN 121:221877

TI Effect of 3, 9-bis (N, N-dimethylcarbamoyloxy)-5H-benzofuro[3,2-c]quinoline-6-one (KCA-098), a new benzofuroquinoline derivative, on calcium-regulating hormones in rats on a normal or calcium-deficient diet

AU Kojima, Masami; Tsutsumi, Naoyuki; Arai, Nobuhiko; Itoh, Fumiaki; Ujije, Arai; Kawashima, Kohtaro; Endoh, Hiroyoshi; Okazaki, Mitsuo
 CS Central Research Laboratories, Kissei Pharmaceutical Co., Ltd., Hotaka, 399-83, Japan

SO Iyakuin Kenkyu (1994), 25(6), 453-8
 CODEN: IYKEDH; ISSN: 0287-0894

DT Journal

LA Japanese

AB A new benzofuroquinoline derivative, 3, 9-bis (N, N-dimethylcarbamoyloxy) 5H-benzofuro [3, 2-c]quinoline-6-one (designated as KCA-098), has the unique effects of inhibiting bone resorption and stimulating bone formation. The object of this study was to investigate whether KCA-098 affects the serum calcium and calcium-regulating hormone levels in rats

on a normal diet (1.2% Ca) or a calcium-deficient diet (0.03% Ca). KCA-098 (1, 10, and 100 mg/kg) had no effect on the serum calcium level, but increased calcitonin secretion in rats on a normal diet. Serum parathyroid hormone (PTH) secretion was also significantly increased by KCA-098 (10 and 100 mg/kg). These results suggest that KCA-098 has stimulates calcitonin secretion and secondarily causes PTH secretion to maintain a normal serum calcium level. After 3 days on the calcium-deficient diet, the animals maintained a normal serum calcium level, but their serum PTH levels were elevated. KCA-098 (1, 10, and 100 mg/kg) dose-dependently inhibited this elevation of PTH secretion. When the rats were fed the calcium-deficient diet for 14 days, their serum calcium and calcitonin levels were significantly reduced but their serum PTH levels were significantly elevated. KCA-098 (100 mg/kg)

significantly reduced the serum calcium level in these animals, presumably due to inhibition of bone resorption. These results demonstrate that the new compound, KCA-098, has a stimulatory action on calcitonin secretion and

an inhibitory action on PTH secretion.

IT 129794-24-7, KCA-098

RL: BAC (Biological activity or effector, except adverse); BSU

(Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study);

USES

(Uses)

(benzofuroquinoline derivative KCA-098 calcium-dependent effect on calcitonin and parathyroid hormone)

RN 129794-24-7 CAPLUS

CN Carbamic acid, dimethyl-, 5, 6-dihydro-6-oxobenzofuro[3,2-c]quinoline-3,9-diyl ester (9CI) (CA INDEX NAME)

L7 ANSWER 67 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN

AN 1994:645180 CAPLUS

DN 121:245180

TI Molecular geometry and physicochemical characteristics of selected anilinoquinolines, indolo[3,2-c]quinolines and tetrahydroindolo[3,2-d]benzazepines

AU Koh, Hwee Ling; Go, Mei Lin; Ngiam, Tong Lan

CS Dep. Pharm., Natl. Univ. Singapore, Singapore, 0511, Singapore

SO Chemical & Pharmaceutical Bulletin (1994), 42(5), 1084-7

CODEN: CPBTAL; ISSN: 0009-2363

DT Journal

LA English

AB The mol. geometry, acid dissociation consts. and partition coeffs. of the anilinoquinoline (I), indolo[3,2-c]quinoline (II) and

tetrahydroindolo[3,2-d]benzazepine (III) ring systems have been determined using

representative

compds.: 7-chloro-4-(p-anisidino)quinoline (Ia), 3-chloro-8-methoxy-11H-indolo[3,2-c]quinoline (IIa) and 3-chloro-9-methoxy-5,6,7,12-

tetrahydroindolo[3,2-d][1]benzazepine (IIIa). Ring systems II and III are cyclic analogs of I. The min. energy conformation was determined by

mol.

mechanics. Compound IIa is the most planar and conformationally restricted,

followed by IIIa and Ia. The acid dissociation consts. (pKa) were determined by

the solubility method. The ring nitrogen of Ia is most basic, followed by that

of IIa and IIIa. The partition coefficient (log P) was determined between octanol

and appropriate aqueous buffers by the shaken flask method.

Hydrophobicity

decreases in the order of Ia>IIa>IIIa. Factors contributing to the different mol. geometry, pKa and hydrophobicity of these related compds.

are discussed. The present study may contribute to the design of better drugs with ring system I, II or III.

IT 116792-06-4

RL: PRP (Properties)

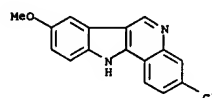
(mol. geometry and acid dissociation constant and partition

coefficient of, drug

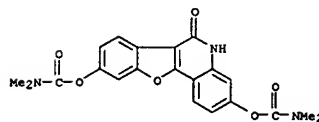
design in relation to)

RN 116792-06-4 CAPLUS

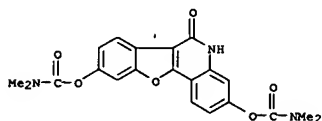
CN 11H-Indolo[3,2-c]quinoline, 3-chloro-8-methoxy- (9CI) (CA INDEX NAME)



L7 ANSWER 68 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



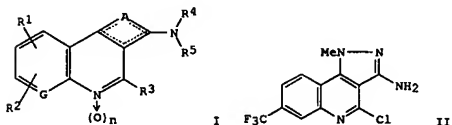
L7 ANSWER 69 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 1994:570516 CAPLUS
 DN 121:170516
 TI Effects of KCA-098 on bone metabolism: comparison with those of ipriflavone
 AU Tsutsumi, Naoyuki; Kawashima, Kohtaro; Nagata, Hideo; Tsuyuki, Junko; Itoh, Fumiaki; Arai, Nobuhiko; Kojima, Masami; Ujile, Arai; Endo, Hiroyoshi
 CS Central Res. Lab., Kissei Pharmaceut. Co., Ltd., Nagano, 399-83, Japan
 SO Japanese Journal of Pharmacology (1994), 65(4), 343-9
 CODEN: JJPAAZ; ISSN: 0021-5198
 DT Journal
 LA English
 AB We previously found that 3,9-bis(N,N-dimethylcarbamoyloxy)-5H-benzofuro[3,2-c]quinoline-6-one (KCA-098) inhibited bone resorption in organ culture. In this study, to determine if KCA-098 is therapeutically applicable for the treatment of osteoporosis, we compared the effect of KCA-098 on bone tissues with that of ipriflavone, a drug that is clinically used for the treatment of osteoporosis. Both KCA-098 and ipriflavone inhibited parathyroid hormone-, prostaglandin E₂-, 1 α ,25-dihydroxyvitamin D₃- and interleukin 1 β -induced bone resorption of fetal rat bones, but the inhibitory activity of KCA-098 was more potent than that of ipriflavone. In fact, the effect concns. of KCA-098 were 10 to 100 times lower than those of ipriflavone. Oral administration of KCA-098 (1 and 3 mg/kg) or ipriflavone (100 mg/kg) to ovariectomized rats on a low-calcium diet increased the breaking force and bone d. of the femora, indicating that KCA-098 is as effective on the whole animal as ipriflavone. Furthermore, KCA-098 increased the length and calcium content of 9-day chick embryonic femora cultured in vitro, whereas ipriflavone did not, suggesting that KCA-098 had a direct stimulatory effect on bone mineralization. Therefore, KCA-098 seems to be more potent than ipriflavone in stimulating bone tissue formation and may thus be expected to become a useful agent for the treatment of osteoporosis.
 IT 129794-24-7, KCA-098
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (KCA-098 vs. ipriflavone inhibition of bone resorption)
 RN 129794-24-7 CAPLUS
 CN Carbamic acid, dimethyl-, 5,6-dihydro-6-oxobenzofuro[3,2-c]quinoline-3,9-diyl ester (9CI) (CA INDEX NAME)



L7 ANSWER 70 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 1994:557630 CAPLUS
 DN 121:157630
 TI preparation of quinolines and naphthyridines as drugs
 IN Hashimoto, Kinji; Inoue, Makoto; Tomoyasu, Takahiro; Kamisako, Takuji; Sugimoto, Yukio; Kuwabara, Toshiko
 PA Eisuka Pharma Co Ltd, Japan
 SO Jpn. Kokai Tokkyo Koho, 42 pp.
 CODEN: JPOKXAF
 DT Patent
 LA Japanese
 FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 06092963	A2	1994/04/05	JP 1993-184889	1993/07/27
JP 2997828	B2	2000/01/11		
JP 1992-204044	A1	1992/07/30		

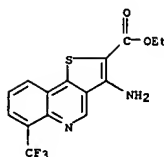
PI JP 2997828
 PRAI JP 1992-204044
 OS MARPAT 121:157630
 GI



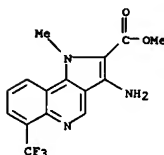
AB Title compds. I (R1, R2 = H, alkyl, alkoxy, halo, nitro, etc.; R3 = H, alkyl, alkoxy, halo, amino, alkylamino; R4, R5 = H, alkanoyl, alkyl, haloalkanoyl, benzoyl, thiocarbonyl, etc.; n = 0, 1; A = NR6, -N, -NR6-, -S-CF6, NR7-CR6; R6 = H, alkyl, hydroxyalkyl, alkoxyalkyl, carboxy; R7 = alkyl; G = C, N], useful as antiinflammatories, immunoregulators, analgesics, antipyretics, etc., (no data), are prepared. Thus, stirring a mixture of 4-chloro-3-cyano-7-(trifluoromethyl)quinoline with methylhydrazine in MeOH at room temperature for 10 min and then at 60° for 30 min gave the title compound II.
 IT 157300-99-7 CAPLUS
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
 (preparation of, as drug)
 RN 157300-99-7 CAPLUS
 CN Thieno[3,2-c]quinoline-2-carboxylic acid, 3-amino-6-(trifluoromethyl)-, ethyl ester (9CI) (CA INDEX NAME)

L7 ANSWER 69 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

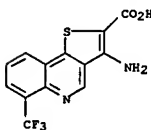
L7 ANSWER 70 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



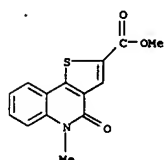
RN 157301-00-3 CAPLUS
 CN 1H-Pyrrolo[3,2-c]quinoline-2-carboxylic acid, 3-amino-1-methyl-6-(trifluoromethyl)-, methyl ester (9CI) (CA INDEX NAME)



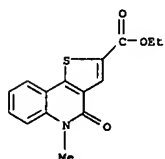
RN 157301-62-7 CAPLUS
 CN Thieno[3,2-c]quinoline-2-carboxylic acid, 3-amino-6-(trifluoromethyl)- (9CI) (CA INDEX NAME)



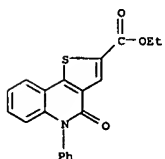
L7 ANSWER 71 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 1994:557548 CAPLUS
 DN 121:157548
 TI Synthesis of 4,5-dihydro-4(5H)-oxothieno[3,2-c]quinoline-2-carboxylic acids and their alkyl esters
 AU Jayashree, A.; Darbarwar, Malleahwar
 CS Dep. Chem., Osmania Univ., Hyderabad, 500 007, India
 SO Indian Journal of Chemistry, Section B: Organic Chemistry Including Medicinal Chemistry (1994), 33B(7), 676-8
 CODEN: IJSBDB; ISSN: 0376-4699
 DT Journal
 LA English
 OS CASREACT 121:157548
 AB 4-Chloro-3-formylquinolin-2(1H)-ones on condensation with thioglycolic acid and its alkyl esters furnish 4,5-dihydro-4(5H)-oxothieno[3,2-c]quinoline-2-carboxylic acids and their alkyl esters, resp. in good yields.
 IT 157370-08-6P 157370-09-7P 157370-10-0P
 157370-11-1P 157370-12-2P 157370-13-3P
 157370-14-4P 157370-15-5P 157370-16-6P
 RL: SPN (Synthetic preparation); PREP (Preparation) (preparation of)
 RN 157370-08-6 CAPLUS
 CN Thieno[3,2-c]quinoline-2-carboxylic acid, 4,5-dihydro-5-methyl-4-oxo-, methyl ester (9CI) (CA INDEX NAME)



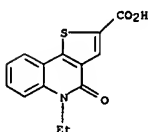
RN 157370-09-7 CAPLUS
 CN Thieno[3,2-c]quinoline-2-carboxylic acid, 4,5-dihydro-5-methyl-4-oxo-, ethyl ester (9CI) (CA INDEX NAME)



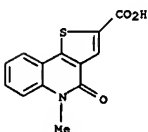
L7 ANSWER 71 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)
 CN Thieno[3,2-c]quinoline-2-carboxylic acid, 4,5-dihydro-4-oxo-5-phenyl-, ethyl ester (9CI) (CA INDEX NAME)



RN 157370-14-4 CAPLUS
 CN Thieno[3,2-c]quinoline-2-carboxylic acid, 5-ethyl-4,5-dihydro-4-oxo- (9CI) (CA INDEX NAME)



RN 157370-15-5 CAPLUS
 CN Thieno[3,2-c]quinoline-2-carboxylic acid, 4,5-dihydro-5-methyl-4-oxo- (9CI) (CA INDEX NAME)

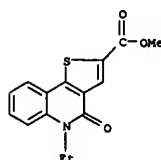


RN 157370-16-6 CAPLUS
 CN Thieno[3,2-c]quinoline-2-carboxylic acid, 4,5-dihydro-4-oxo-5-phenyl- (9CI) (CA INDEX NAME)

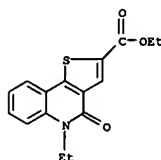


L7 ANSWER 71 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

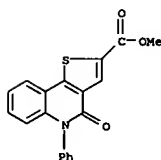
RN 157370-10-0 CAPLUS
 CN Thieno[3,2-c]quinoline-2-carboxylic acid, 5-ethyl-4,5-dihydro-4-oxo-, methyl ester (9CI) (CA INDEX NAME)



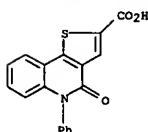
RN 157370-11-1 CAPLUS
 CN Thieno[3,2-c]quinoline-2-carboxylic acid, 5-ethyl-4,5-dihydro-4-oxo-, ethyl ester (9CI) (CA INDEX NAME)



RN 157370-12-2 CAPLUS
 CN Thieno[3,2-c]quinoline-2-carboxylic acid, 4,5-dihydro-4-oxo-5-phenyl-, methyl ester (9CI) (CA INDEX NAME)

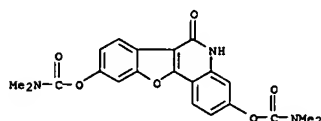


RN 157370-13-3 CAPLUS



L7 ANSWER 71 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

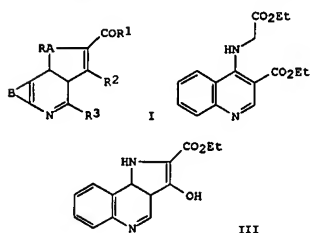
L7 ANSWER 72 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 1994:524940 CAPLUS
 DN 121:124940
 TI In vitro effect of KCA-098, a derivative of coumestrol, on bone resorption of fetal rat femora
 AU Tsutsumi, Naoyuki; Kawashima, Kohtaro; Arai, Nobuhiko; Nagata, Hideo; Kojima, Masami; Ujile, Arai; Endo, Hiroyoshi
 CS Cent. Res. Lab., Kissei Pharm. Co., Ltd., Hotaka, 399-83, Japan
 SO Bone and Mineral (1994), 24(3), 201-9
 CODEN: BOMIET; ISSN: 0169-6009
 DT Journal
 LA English
 AB The effects of 3,9-bis[(N,N-dimethylcarbamoyloxy)-5H-benzofuro[3,2-c]quinoline-6-one (KCA-098), a derivative of coumestrol, on bone resorption was studied in organ cultures of 20-day fetal rat femora. KCA-098 increased the length, dry weight, and calcium and phosphorus contents of parathyroid hormone (PTH)-treated fetal rat femur. As PTH significantly reduced the calcium and phosphorus contents of the femora, probably by stimulating bone resorption, KCA-098 seems to inhibit bone resorption.
 In fact, KCA-098 inhibited the PTH-induced release of ⁴⁵Ca from pre-labeled fetal rat femora into the medium in organ culture. Coumestrol also inhibited the release of ⁴⁵Ca from bone into the medium. However, KCA-098 did not increase the uterine weight of ovariectomized rats, whereas coumestrol did so. Thus KCA-098 is a unique, new inhibitor of bone resorption that has no estrogenic activity.
 IT 129794-24-7, KCA 098
 RL: BIOL (Biological study)
 (bone resorption inhibition by, without estrogen activity)
 RN 129794-24-7 CAPLUS
 CN Carbamic acid, dimethyl-, 5,6-dihydro-6-oxobenzofuro[3,2-c]quinoline-3,9-diyl ester (9CI) (CA INDEX NAME)



L7 ANSWER 73 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 1994:508763 CAPLUS
 DN 121:108763
 TI Preparation of condensed pyridine derivatives as inhibitors of the biological effects of oxygen free radicals
 IN Bachy, Andre; Fraissae, Laurent; Keane, Peter; Mendes, Etienne; Vernieres, Jean Claude; Simland, Jacques
 PA Elf Sanofi SA, Fr.
 SO Eur. Pat. Appl., 24 pp.
 CODEN: EPXXDW
 DT Patent
 LA French
 FAN.CMP 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI EP 587473	A1	19940316	EP 1993-402095	19930825
<-- EP 587473	B1	19981111		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, NL, PT, SE				
FR 2695126	A1	19940304	FR 1992-10329	19920827
<-- FR 2695126	B1	19941110		
US 5360795	A	19941101	US 1993-109073	19930819
<-- AU 9344747	A1	19940303	AU 1993-44747	19930820
<-- AU 659027	B2	19950504		
AT 173258	E	19981115	AT 1993-402095	19930825
<-- ES 2125315	T3	19990301	ES 1993-402095	19930825
<-- CA 2104883	AA	19940228	CA 1993-2104883	19930826
<-- NO 9303051	A	19940228	NO 1993-3051	19930826
<-- HU 64957	A2	19940328	HU 1993-2425	19930826
HU 217623	B	20000328		
JP 06184145	A2	19940705	JP 1993-211451	19930826
<-- FI 103889	B1	19991015	FI 1993-3756	19930826
<-- US 5468750	A	19951121	US 1994-273943	19940712
<-- FI 9602714	A	19960701	FI 1996-2714	19960701
<-- FI 103277	B1	19990531		
FR 1992-10329	A	19920827		
US 1993-109073	A3	19930819		
FI 1993-3756	A	19930826		
OS MARPAT 121:108763				
GI				

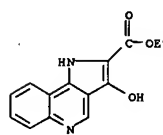
L7 ANSWER 73 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



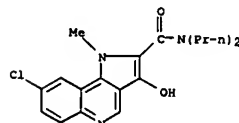
AB Title compds. [I; R1 = OH, alkyl, alkoxy, Ph, PhCH2, PhCH2O, (substituted) amino, aminoalkyl; R2 = OH, SH, alkoxy, alkylthio, (substituted) amino; R3 = H, alkyl, alkylthio, alkoxy, Ph, PhCH2; A = S, N; R = null, H, (substituted) alkyl; B = (substituted) Ph, pyridyl, or thienyl nucleus], were prepared. Thus, aminoacetate II was stirred 10 h with KOHMe3 in PhMe/HOCMe3 to give title compound III. I inhibited the toxic effects of KCN in mice with IC50 = 2-30 mg/kg i.v.
 IT 156564-90-8P 156564-91-9P 156564-92-0P
 156564-93-3P 156564-96-4P 156564-97-5P
 156564-98-6P 156564-99-7P 156565-00-3P
 156565-01-4P 156565-02-5P 156565-03-6P
 156565-04-7P 156565-05-8P 156565-06-9P
 156565-07-0P 156565-08-1P 156565-09-2P
 156565-10-3P 156565-11-6P 156565-12-7P
 156565-13-8P 156565-14-9P 156565-15-0P
 156565-16-1P 156565-17-2P 156565-18-3P
 156565-19-4P 156565-20-7P 156565-21-8P
 156565-22-9P 156565-23-0P 156565-24-1P
 156565-25-2P 156565-26-3P 156565-27-4P
 156565-28-5P 156565-29-6P 156565-30-9P
 156565-31-0P 156565-32-1P 156565-33-2P
 156565-34-3P 156565-35-4P 156565-36-5P
 156565-37-6P 156565-38-7P 156565-39-8P
 156565-40-1P 156565-41-2P 156565-42-3P
 156565-43-4P 156565-44-5P 156565-45-6P
 156565-46-7P 156565-47-8P 156565-48-9P
 156565-49-0P 156565-50-3P 156565-51-4P
 156565-52-5P 156565-53-6P 156565-54-7P
 156565-55-8P 156565-56-9P 156565-57-0P
 156565-58-1P 156565-59-2P 156565-60-3P
 156565-61-6P 156565-62-7P 156565-63-8P
 156565-64-9P 156565-65-0P 156565-66-1P
 156565-67-2P 156565-68-3P 156565-69-4P
 156565-70-7P 156565-71-8P 156565-72-9P
 156565-73-0P 156565-74-1P 156565-75-2P
 156565-76-3P 156565-77-4P 156565-78-5P
 156565-79-6P 156565-80-9P 156565-81-0P
 156565-82-1P 156565-83-2P 156565-84-3P

L7 ANSWER 73 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

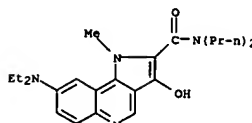
156565-85-4P 156565-86-5P 156565-87-6P
 156565-88-7P 156565-89-8P 156565-90-1P
 156565-91-2P 156565-92-3P 156565-93-4P
 156565-94-5P 156565-95-6P 156565-96-7P
 156565-97-8P 156565-98-9P 156565-99-0P
 156566-00-6P 156566-01-7P 156566-02-8P
 156566-03-9P 156566-04-0P 156566-23-3P
 156566-24-4P 156566-26-6P 156566-27-7P
 156566-28-8P 156566-29-9P 156566-30-2P
 156566-31-3P 156566-32-4P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (prepn. of, as inhibitor of biol. effects of free radicals)
 RN 156564-90-8 CAPLUS
 CN 1H-Pyrrolo[3,2-c]quinoline-2-carboxylic acid, 3-hydroxy-, ethyl ester (9CI) (CA INDEX NAME)



RN 156564-91-9 CAPLUS
 CN 1H-Pyrrolo[3,2-c]quinoline-2-carboxamide, 8-chloro-3-hydroxy-1-methyl-N,N-dipropyl- (9CI) (CA INDEX NAME)

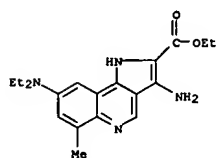


RN 156564-92-0 CAPLUS
 CN 1H-Pyrrolo[3,2-c]quinoline-2-carboxamide, 8-(diethylamino)-3-hydroxy-1-methyl-N,N-dipropyl- (9CI) (CA INDEX NAME)

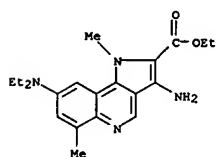


L7 ANSWER 73 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

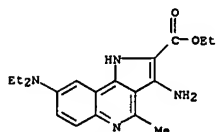
RN 156564-95-3 CAPLUS
 CN 1H-Pyrrolo[3,2-c]quinoline-2-carboxylic acid, 3-amino-8-(diethylamino)-6-methyl-, ethyl ester (9CI) (CA INDEX NAME)



RN 156564-96-4 CAPLUS
 CN 1H-Pyrrolo[3,2-c]quinoline-2-carboxylic acid, 3-amino-8-(diethylamino)-1,6-dimethyl-, ethyl ester (9CI) (CA INDEX NAME)



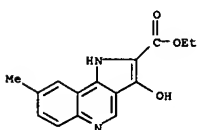
RN 156564-97-5 CAPLUS
 CN 1H-Pyrrolo[3,2-c]quinoline-2-carboxylic acid, 3-amino-8-(diethylamino)-4-methyl-, ethyl ester (9CI) (CA INDEX NAME)



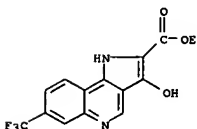
RN 156564-98-6 CAPLUS
 CN 1H-Pyrrolo[3,2-c]quinoline-2-carboxamide, 8-(diethylamino)-3-ethoxy-1-

L7 ANSWER 73 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

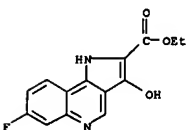
RN 156565-02-5 CAPLUS
 CN 1H-Pyrrolo[3,2-c]quinoline-2-carboxylic acid, 3-hydroxy-8-methyl-, ethyl ester (9CI) (CA INDEX NAME)



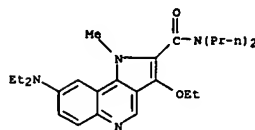
RN 156565-03-6 CAPLUS
 CN 1H-Pyrrolo[3,2-c]quinoline-2-carboxylic acid, 3-hydroxy-7-(trifluoromethyl)-, ethyl ester (9CI) (CA INDEX NAME)



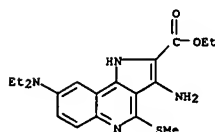
RN 156565-04-7 CAPLUS
 CN 1H-Pyrrolo[3,2-c]quinoline-2-carboxylic acid, 7-fluoro-3-hydroxy-, ethyl ester (9CI) (CA INDEX NAME)



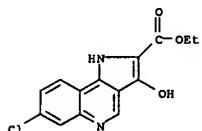
L7 ANSWER 73 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)
 methyl-N,N-dipropyl- (9CI) (CA INDEX NAME)



RN 156564-99-7 CAPLUS
 CN 1H-Pyrrolo[3,2-c]quinoline-2-carboxylic acid, 3-amino-8-(diethylamino)-4-(methylthio)-, ethyl ester (9CI) (CA INDEX NAME)



RN 156565-00-3 CAPLUS
 CN 1H-Pyrrolo[3,2-c]quinoline-2-carboxylic acid, 7-chloro-3-hydroxy-, ethyl ester (9CI) (CA INDEX NAME)

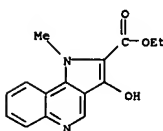


RN 156565-01-4 CAPLUS
 CN 1H-Pyrrolo[3,2-c]quinoline-2-carboxylic acid, 8-chloro-3-hydroxy-, ethyl ester (9CI) (CA INDEX NAME)



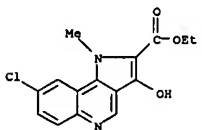
L7 ANSWER 73 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

RN 156565-05-8 CAPLUS
 CN 1H-Pyrrolo[3,2-c]quinoline-2-carboxylic acid, 3-hydroxy-1-methyl-, ethyl ester, monohydrochloride (9CI) (CA INDEX NAME)

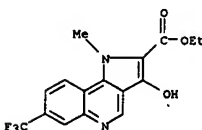


● HCl

RN 156565-06-9 CAPLUS
 CN 1H-Pyrrolo[3,2-c]quinoline-2-carboxylic acid, 8-chloro-3-hydroxy-1-methyl-, ethyl ester (9CI) (CA INDEX NAME)

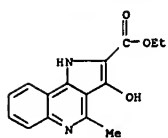


RN 156565-07-0 CAPLUS
 CN 1H-Pyrrolo[3,2-c]quinoline-2-carboxylic acid, 3-hydroxy-1-methyl-7-(trifluoromethyl)-, ethyl ester (9CI) (CA INDEX NAME)

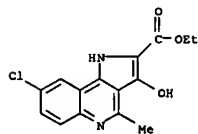


RN 156565-08-1 CAPLUS
 CN 1H-Pyrrolo[3,2-c]quinoline-2-carboxylic acid, 3-hydroxy-4-methyl-, ethyl ester (9CI) (CA INDEX NAME)

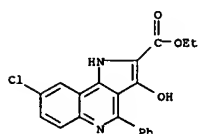
L7 ANSWER 73 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



RN 156565-09-2 CAPLUS
CN 1H-Pyrrolo[3,2-c]quinoline-2-carboxylic acid,
8-chloro-3-hydroxy-4-methyl-
, ethyl ester (9CI) (CA INDEX NAME)

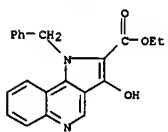


RN 156565-10-5 CAPLUS
CN 1H-Pyrrolo[3,2-c]quinoline-2-carboxylic acid,
8-chloro-3-hydroxy-4-phenyl-
, ethyl ester (9CI) (CA INDEX NAME)



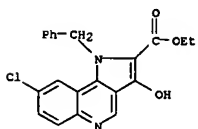
RN 156565-11-6 CAPLUS
CN 1H-Pyrrolo[3,2-c]quinoline-2-carboxylic acid,
8-(diethylamino)-3-hydroxy-
, ethyl ester (9CI) (CA INDEX NAME)

L7 ANSWER 73 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

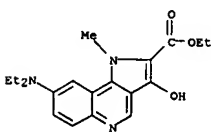


● HCl

RN 156565-15-0 CAPLUS
CN 1H-Pyrrolo[3,2-c]quinoline-2-carboxylic acid, 8-chloro-3-hydroxy-1-
(phenylmethyl)-, ethyl ester (9CI) (CA INDEX NAME)



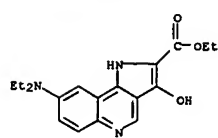
RN 156565-16-1 CAPLUS
CN 1H-Pyrrolo[3,2-c]quinoline-2-carboxylic acid,
8-(diethylamino)-3-hydroxy-1-
methyl-, ethyl ester, monohydrochloride (9CI) (CA INDEX NAME)



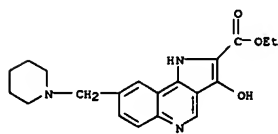
● HCl

RN 156565-17-2 CAPLUS
CN 1H-Pyrrolo[3,2-c]quinoline-2-carboxylic acid, 3-hydroxy-1-methyl-8-(4-
methyl-1-piperazinyl)-, ethyl ester (9CI) (CA INDEX NAME)

L7 ANSWER 73 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

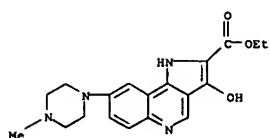


RN 156565-12-7 CAPLUS
CN 1H-Pyrrolo[3,2-c]quinoline-2-carboxylic acid, 3-hydroxy-8-(1-
piperidinylmethyl)-, ethyl ester, monohydrochloride (9CI) (CA INDEX
NAME)



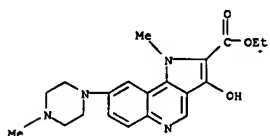
● HCl

RN 156565-13-8 CAPLUS
CN 1H-Pyrrolo[3,2-c]quinoline-2-carboxylic acid, 3-hydroxy-8-(4-methyl-1-
piperazinyl)-, ethyl ester (9CI) (CA INDEX NAME)

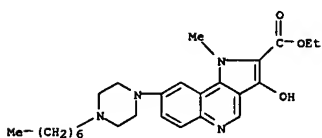


RN 156565-14-9 CAPLUS
CN 1H-Pyrrolo[3,2-c]quinoline-2-carboxylic acid,
3-hydroxy-1-(phenylmethyl)-
, ethyl ester, monohydrochloride (9CI) (CA INDEX NAME)

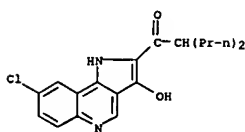
L7 ANSWER 73 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



RN 156565-18-3 CAPLUS
CN 1H-Pyrrolo[3,2-c]quinoline-2-carboxylic acid,
8-(4-heptyl-1-piperazinyl)-3-
hydroxy-1-methyl-, ethyl ester (9CI) (CA INDEX NAME)

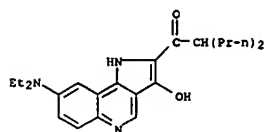


RN 156565-19-4 CAPLUS
CN 1-Pentanone, 1-(8-chloro-3-hydroxy-1H-pyrrolo[3,2-c]quinolin-2-yl)-2-
propyl- (9CI) (CA INDEX NAME)

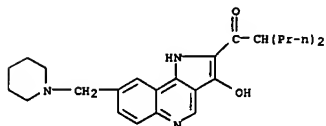


RN 156565-20-7 CAPLUS
CN 1-Pentanone,
1-(8-(diethylamino)-3-hydroxy-1H-pyrrolo[3,2-c]quinolin-2-yl)-2-
propyl- (9CI) (CA INDEX NAME)

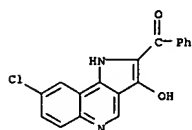
L7 ANSWER 73 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



RN 156565-21-8 CAPLUS
CN 1-Pentanone, 1-[3-hydroxy-8-(1-piperidinylmethyl)-1H-pyrrolo[3,2-c]quinolin-2-yl]-2-propyl- (9CI) (CA INDEX NAME)

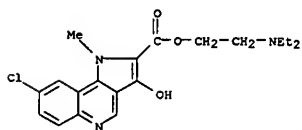


RN 156565-22-9 CAPLUS
CN Methanone, [8-(chloro-3-hydroxy-1H-pyrrolo[3,2-c]quinolin-2-yl)phenyl- (9CI) (CA INDEX NAME)

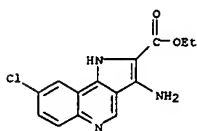


RN 156565-23-0 CAPLUS
CN Methanone, [8-(diethylamino)-3-hydroxy-1H-pyrrolo[3,2-c]quinolin-2-yl]phenyl- (9CI) (CA INDEX NAME)

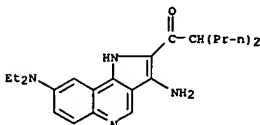
L7 ANSWER 73 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



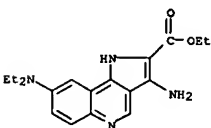
RN 156565-27-4 CAPLUS
CN 1H-Pyrrolo[3,2-c]quinoline-2-carboxylic acid, 3-amino-8-chloro-, ethyl ester (9CI) (CA INDEX NAME)



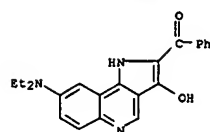
RN 156565-28-5 CAPLUS
CN 1-Pentanone, 1-[3-amino-8-(diethylamino)-1H-pyrrolo[3,2-c]quinolin-2-yl]-2-propyl- (9CI) (CA INDEX NAME)



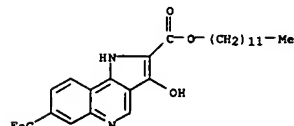
RN 156565-29-6 CAPLUS
CN 1H-Pyrrolo[3,2-c]quinoline-2-carboxylic acid, 3-amino-8-(diethylamino)-, ethyl ester (9CI) (CA INDEX NAME)



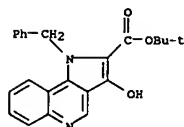
L7 ANSWER 73 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



RN 156565-24-1 CAPLUS
CN 1H-Pyrrolo[3,2-c]quinoline-2-carboxylic acid, 3-hydroxy-7-(trifluoromethyl)-, dodecyl ester (9CI) (CA INDEX NAME)



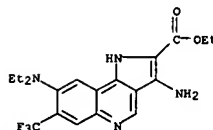
RN 156565-25-2 CAPLUS
CN 1H-Pyrrolo[3,2-c]quinoline-2-carboxylic acid, 3-hydroxy-1-(phenylmethyl)-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)



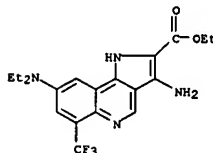
RN 156565-26-3 CAPLUS
CN 1H-Pyrrolo[3,2-c]quinoline-2-carboxylic acid, 8-chloro-3-hydroxy-1-methyl-, 2-(diethylamino)ethyl ester (9CI) (CA INDEX NAME)

L7 ANSWER 73 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

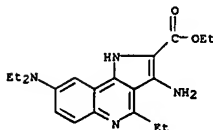
RN 156565-30-9 CAPLUS
CN 1H-Pyrrolo[3,2-c]quinoline-2-carboxylic acid, 3-amino-8-(diethylamino)-7-(trifluoromethyl)-, ethyl ester (9CI) (CA INDEX NAME)



RN 156565-31-0 CAPLUS
CN 1H-Pyrrolo[3,2-c]quinoline-2-carboxylic acid, 3-amino-8-(diethylamino)-6-(trifluoromethyl)-, ethyl ester (9CI) (CA INDEX NAME)

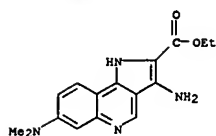


RN 156565-32-1 CAPLUS
CN 1H-Pyrrolo[3,2-c]quinoline-2-carboxylic acid, 3-amino-8-(diethylamino)-4-ethyl-, ethyl ester (9CI) (CA INDEX NAME)

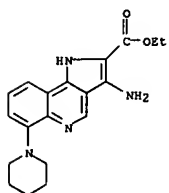


RN 156565-33-2 CAPLUS
CN 1H-Pyrrolo[3,2-c]quinoline-2-carboxylic acid, 3-amino-7-(dimethylamino)-, ethyl ester (9CI) (CA INDEX NAME)

L7 ANSWER 73 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

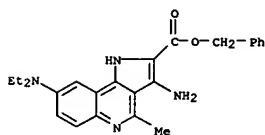


RN 156565-34-3 CAPLUS
 CN 1H-Pyrrolo[3,2-c]quinoline-2-carboxylic acid, 3-amino-6-(1-piperidinyl)-, ethyl ester, dihydrochloride (9CI) (CA INDEX NAME)



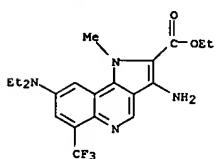
● 2 HCl

RN 156565-35-4 CAPLUS
 CN 1H-Pyrrolo[3,2-c]quinoline-2-carboxylic acid, 3-amino-8-(diethylamino)-4-methyl-, phenylmethyl ester (9CI) (CA INDEX NAME)

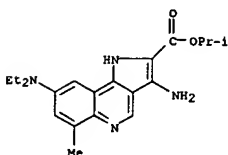


RN 156565-36-5 CAPLUS
 CN 1H-Pyrrolo[3,2-c]quinoline-2-carboxylic acid, 3-amino-8-(diethylamino)-4-ethyl-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

L7 ANSWER 73 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

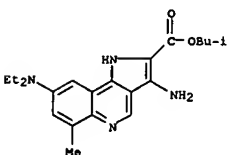


RN 156565-40-1 CAPLUS
 CN 1H-Pyrrolo[3,2-c]quinoline-2-carboxylic acid, 3-amino-8-(diethylamino)-6-methyl-, 1-methylethyl ester, monohydrochloride (9CI) (CA INDEX NAME)



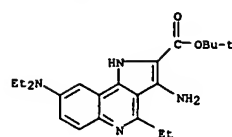
● HCl

RN 156565-41-2 CAPLUS
 CN 1H-Pyrrolo[3,2-c]quinoline-2-carboxylic acid, 3-amino-8-(diethylamino)-6-methyl-, 2-methylpropyl ester (9CI) (CA INDEX NAME)

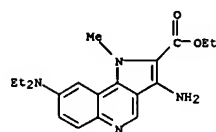


RN 156565-42-3 CAPLUS
 CN 1H-Pyrrolo[3,2-c]quinoline-2-carboxylic acid, 3-amino-8-(diethylamino)-4-methyl-, 1-methylethyl ester (9CI) (CA INDEX NAME)

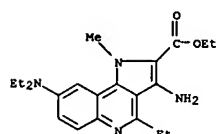
L7 ANSWER 73 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



RN 156565-37-6 CAPLUS
 CN 1H-Pyrrolo[3,2-c]quinoline-2-carboxylic acid, 3-amino-8-(diethylamino)-1-methyl-, ethyl ester (9CI) (CA INDEX NAME)

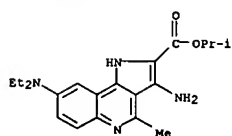


RN 156565-38-7 CAPLUS
 CN 1H-Pyrrolo[3,2-c]quinoline-2-carboxylic acid, 3-amino-8-(diethylamino)-4-ethyl-1-methyl-, ethyl ester (9CI) (CA INDEX NAME)

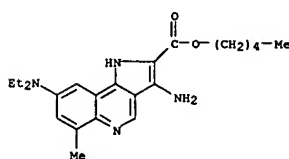


RN 156565-39-8 CAPLUS
 CN 1H-Pyrrolo[3,2-c]quinoline-2-carboxylic acid, 3-amino-8-(diethylamino)-1-methyl-6-(trifluoromethyl)-, ethyl ester (9CI) (CA INDEX NAME)

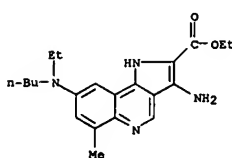
L7 ANSWER 73 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



RN 156565-43-4 CAPLUS
 CN 1H-Pyrrolo[3,2-c]quinoline-2-carboxylic acid, 3-amino-8-(diethylamino)-6-methyl-, pentyl ester (9CI) (CA INDEX NAME)

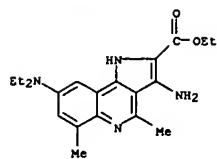


RN 156565-44-5 CAPLUS
 CN 1H-Pyrrolo[3,2-c]quinoline-2-carboxylic acid, 3-amino-8-(diethylamino)-6-methyl-, (CH2)4-Me ester (9CI) (CA INDEX NAME)

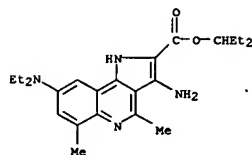


RN 156565-45-6 CAPLUS
 CN 1H-Pyrrolo[3,2-c]quinoline-2-carboxylic acid, 3-amino-8-(diethylamino)-4,6-dimethyl-, ethyl ester (9CI) (CA INDEX NAME)

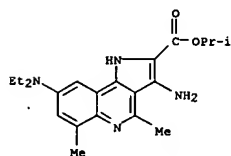
L7 ANSWER 73 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



RN 156565-46-7 CAPLUS
CN 1H-Pyrrolo[3,2-c]quinoline-2-carboxylic acid,
3-amino-8-(diethylamino)-4,6-
dimethyl-, 1-ethylpropyl ester (9CI) (CA INDEX NAME)

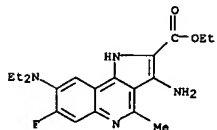


RN 156565-47-8 CAPLUS
CN 1H-Pyrrolo[3,2-c]quinoline-2-carboxylic acid,
3-amino-8-(diethylamino)-4,6-
dimethyl-, 1-methylethyl ester (9CI) (CA INDEX NAME)

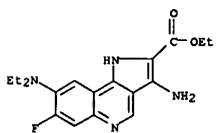


RN 156565-48-9 CAPLUS
CN 1H-Pyrrolo[3,2-c]quinoline-2-carboxylic acid,
3-amino-8-(diethylamino)-4,6-
dimethyl-, 1-methylpropyl ester (9CI) (CA INDEX NAME)

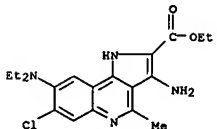
L7 ANSWER 73 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



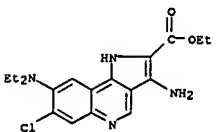
RN 156565-52-5 CAPLUS
CN 1H-Pyrrolo[3,2-c]quinoline-2-carboxylic acid, 3-amino-8-(diethylamino)-7-
fluoro-, ethyl ester (9CI) (CA INDEX NAME)



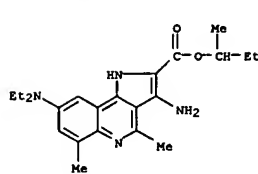
RN 156565-53-6 CAPLUS
CN 1H-Pyrrolo[3,2-c]quinoline-2-carboxylic acid, 3-amino-7-chloro-8-
(diethylamino)-4-methyl-, ethyl ester (9CI) (CA INDEX NAME)



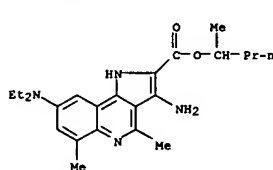
RN 156565-54-7 CAPLUS
CN 1H-Pyrrolo[3,2-c]quinoline-2-carboxylic acid, 3-amino-7-chloro-8-
(diethylamino)-, ethyl ester (9CI) (CA INDEX NAME)



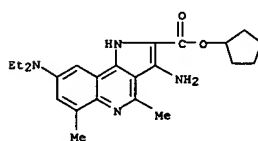
L7 ANSWER 73 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



RN 156565-49-0 CAPLUS
CN 1H-Pyrrolo[3,2-c]quinoline-2-carboxylic acid,
3-amino-8-(diethylamino)-4,6-
dimethyl-, 1-methylbutyl ester (9CI) (CA INDEX NAME)



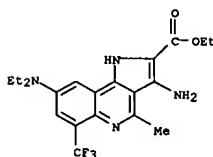
RN 156565-50-3 CAPLUS
CN 1H-Pyrrolo[3,2-c]quinoline-2-carboxylic acid,
3-amino-8-(diethylamino)-4,6-
dimethyl-, cyclopentyl ester (9CI) (CA INDEX NAME)



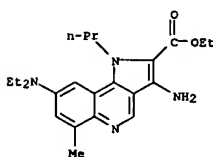
RN 156565-51-4 CAPLUS
CN 1H-Pyrrolo[3,2-c]quinoline-2-carboxylic acid, 3-amino-8-(diethylamino)-7-
fluoro-4-methyl-, ethyl ester (9CI) (CA INDEX NAME)

L7 ANSWER 73 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

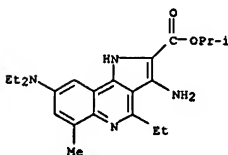
RN 156565-55-8 CAPLUS
CN 1H-Pyrrolo[3,2-c]quinoline-2-carboxylic acid, 3-amino-8-(diethylamino)-4-
methyl-6-(trifluoromethyl)-, ethyl ester (9CI) (CA INDEX NAME)



RN 156565-56-9 CAPLUS
CN 1H-Pyrrolo[3,2-c]quinoline-2-carboxylic acid, 3-amino-8-(diethylamino)-6-
methyl-1-propyl-, ethyl ester (9CI) (CA INDEX NAME)

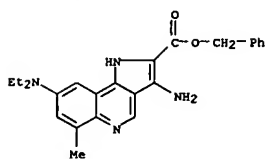


RN 156565-57-0 CAPLUS
CN 1H-Pyrrolo[3,2-c]quinoline-2-carboxylic acid, 3-amino-8-(diethylamino)-4-
ethyl-6-methyl-, 1-methylethyl ester (9CI) (CA INDEX NAME)

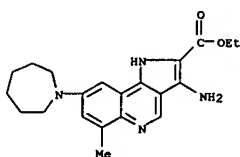


RN 156565-58-1 CAPLUS
CN 1H-Pyrrolo[3,2-c]quinoline-2-carboxylic acid, 3-amino-8-(diethylamino)-6-
methyl-, phenylmethyl ester (9CI) (CA INDEX NAME)

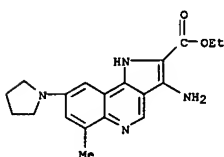
L7 ANSWER 73 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



RN 156565-59-2 CAPLUS
 CN 1H-Pyrrolo[3,2-c]quinoline-2-carboxylic acid, 3-amino-8-(hexahydro-1H-azepin-1-yl)-6-methyl-, ethyl ester (9CI) (CA INDEX NAME)

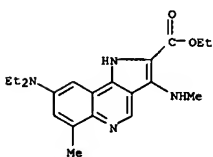


RN 156565-60-5 CAPLUS
 CN 1H-Pyrrolo[3,2-c]quinoline-2-carboxylic acid, 3-amino-6-methyl-8-(1-pyrrolidinyl)-, ethyl ester (9CI) (CA INDEX NAME)

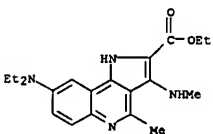


RN 156565-61-6 CAPLUS
 CN 1H-Pyrrolo[3,2-c]quinoline-2-carboxylic acid, 3-amino-8-(hexahydro-1(2H)-azocinyl)-4,6-dimethyl-, 1-methylethyl ester (9CI) (CA INDEX NAME)

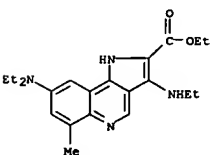
L7 ANSWER 73 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



RN 156565-65-0 CAPLUS
 CN 1H-Pyrrolo[3,2-c]quinoline-2-carboxylic acid, 3-amino-8-(diethylamino)-4-methyl-, ethyl ester (9CI) (CA INDEX NAME)

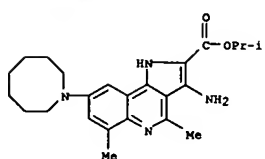


RN 156565-66-1 CAPLUS
 CN 1H-Pyrrolo[3,2-c]quinoline-2-carboxylic acid, 3-amino-8-(diethylamino)-6-methyl-, ethyl ester (9CI) (CA INDEX NAME)

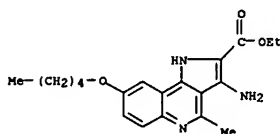


RN 156565-67-2 CAPLUS
 CN 1H-Pyrrolo[3,2-c]quinoline-2-carboxylic acid, 3-amino-8-(diethylamino)-6-methyl-3-(propylamino)-, ethyl ester (9CI) (CA INDEX NAME)

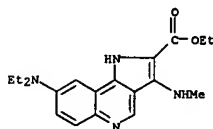
L7 ANSWER 73 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



RN 156565-62-7 CAPLUS
 CN 1H-Pyrrolo[3,2-c]quinoline-2-carboxylic acid, 3-amino-4-methyl-8-(pentyloxy)-, ethyl ester (9CI) (CA INDEX NAME)

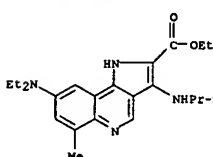


RN 156565-63-8 CAPLUS
 CN 1H-Pyrrolo[3,2-c]quinoline-2-carboxylic acid, 8-(diethylamino)-3-(methylamino)-, ethyl ester (9CI) (CA INDEX NAME)

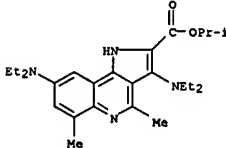


RN 156565-64-9 CAPLUS
 CN 1H-Pyrrolo[3,2-c]quinoline-2-carboxylic acid, 8-(diethylamino)-6-methyl-3-(methylamino)-, ethyl ester (9CI) (CA INDEX NAME)

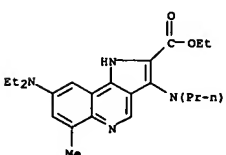
L7 ANSWER 73 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



RN 156565-68-3 CAPLUS
 CN 1H-Pyrrolo[3,2-c]quinoline-2-carboxylic acid, 3,8-bis(diethylamino)-4,6-dimethyl-, 1-methylethyl ester (9CI) (CA INDEX NAME)

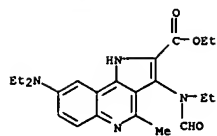


RN 156565-69-4 CAPLUS
 CN 1H-Pyrrolo[3,2-c]quinoline-2-carboxylic acid, 8-(diethylamino)-3-(dipropylamino)-6-methyl-, ethyl ester (9CI) (CA INDEX NAME)

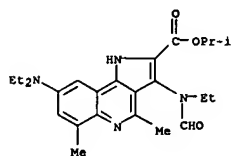


RN 156565-70-7 CAPLUS
 CN 1H-Pyrrolo[3,2-c]quinoline-2-carboxylic acid, 8-(diethylamino)-3-(ethylformylamino)-4-methyl-, ethyl ester (9CI) (CA INDEX NAME)

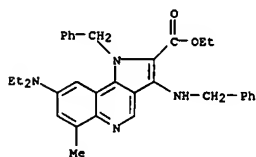
L7 ANSWER 73 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



RN 156565-71-9 CAPLUS
CN 1H-Pyrrolo[3,2-c]quinoline-2-carboxylic acid, 8-(diethylamino)-3-(ethylformylamino)-4,6-dimethyl-, 1-methylethyl ester (9CI) (CA INDEX NAME)

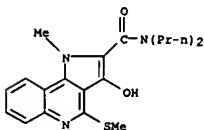


RN 156565-72-9 CAPLUS
CN 1H-Pyrrolo[3,2-c]quinoline-2-carboxylic acid, 8-(diethylamino)-6-methyl-1-(phenylmethyl)-3-[(phenylmethyl)amino]-, ethyl ester (9CI) (CA INDEX NAME)

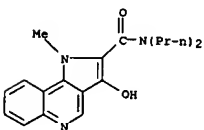


RN 156565-73-0 CAPLUS
CN 1H-Pyrrolo[3,2-c]quinoline-2-carboxylic acid, 3-amino-8-(diethylamino)-4,6-dimethyl-, cyclohexyl ester (9CI) (CA INDEX NAME)

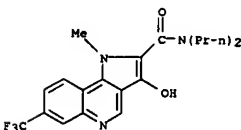
L7 ANSWER 73 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



RN 156565-77-4 CAPLUS
CN 1H-Pyrrolo[3,2-c]quinoline-2-carboxamide, 3-hydroxy-1-methyl-N,N-dipropyl-, 7-(trifluoromethyl)- (9CI) (CA INDEX NAME)

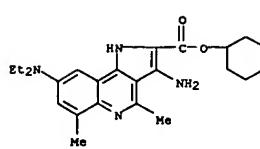


RN 156565-78-5 CAPLUS
CN 1H-Pyrrolo[3,2-c]quinoline-2-carboxamide, 3-hydroxy-1-methyl-N,N-dipropyl-, 7-(trifluoromethyl)- (9CI) (CA INDEX NAME)

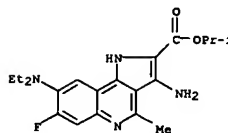


RN 156565-79-6 CAPLUS
CN 1H-Pyrrolo[3,2-c]quinoline-2-carboxamide, 3-hydroxy-1,8-dimethyl-N,N-dipropyl-, (9CI) (CA INDEX NAME)

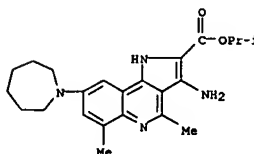
L7 ANSWER 73 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



RN 156565-74-1 CAPLUS
CN 1H-Pyrrolo[3,2-c]quinoline-2-carboxylic acid, 3-amino-8-(diethylamino)-7-fluoro-4-methyl-, 1-methylethyl ester (9CI) (CA INDEX NAME)

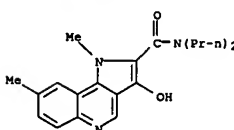


RN 156565-75-2 CAPLUS
CN 1H-Pyrrolo[3,2-c]quinoline-2-carboxylic acid, 3-amino-8-(hexahydro-1H-azepin-1-yl)-4,6-dimethyl-, 1-methylethyl ester (9CI) (CA INDEX NAME)

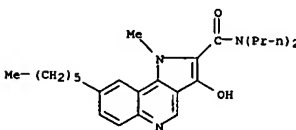


RN 156565-76-3 CAPLUS
CN 1H-Pyrrolo[3,2-c]quinoline-2-carboxamide, 3-hydroxy-1-methyl-4-(methylthio)-N,N-dipropyl-, (9CI) (CA INDEX NAME)

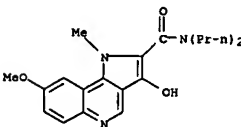
L7 ANSWER 73 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



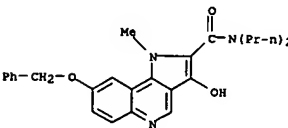
RN 156565-80-9 CAPLUS
CN 1H-Pyrrolo[3,2-c]quinoline-2-carboxamide, 6-hexyl-3-hydroxy-1-methyl-N,N-dipropyl-, (9CI) (CA INDEX NAME)



RN 156565-81-0 CAPLUS
CN 1H-Pyrrolo[3,2-c]quinoline-2-carboxamide, 3-hydroxy-8-methoxy-1-methyl-N,N-dipropyl-, (9CI) (CA INDEX NAME)

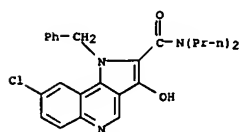


RN 156565-82-1 CAPLUS
CN 1H-Pyrrolo[3,2-c]quinoline-2-carboxamide, 3-hydroxy-1-methyl-8-(phenylmethoxy)-N,N-dipropyl-, (9CI) (CA INDEX NAME)

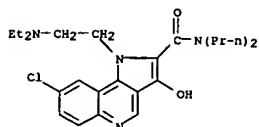


L7 ANSWER 73 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

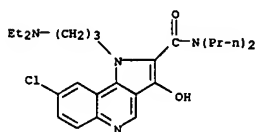
RN 156565-83-2 CAPLUS
 CN 1H-Pyrrolo[3,2-c]quinoline-2-carboxamide, 8-chloro-3-hydroxy-1-(phenylmethyl)-N,N-dipropyl- (9CI) (CA INDEX NAME)



RN 156565-84-3 CAPLUS
 CN 1H-Pyrrolo[3,2-c]quinoline-2-carboxamide, 8-chloro-1-[2-(diethylamino)ethyl]-3-hydroxy-N,N-dipropyl- (9CI) (CA INDEX NAME)

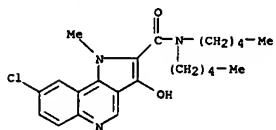


RN 156565-85-4 CAPLUS
 CN 1H-Pyrrolo[3,2-c]quinoline-2-carboxamide, 8-chloro-1-[3-(diethylamino)propyl]-3-hydroxy-N,N-dipropyl- (9CI) (CA INDEX NAME)

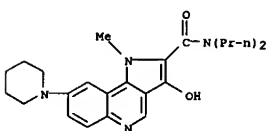


RN 156565-86-5 CAPLUS
 CN 1H-Pyrrolo[3,2-c]quinoline-2-carboxamide, 8-chloro-1-ethyl-3-hydroxy-N,N-dipropyl- (9CI) (CA INDEX NAME)

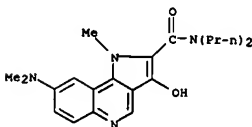
L7 ANSWER 73 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



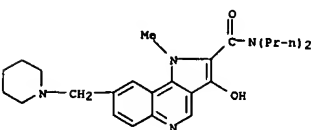
RN 156565-90-1 CAPLUS
 CN 1H-Pyrrolo[3,2-c]quinoline-2-carboxamide, 3-hydroxy-1-methyl-8-(1-piperidinyl)-N,N-dipropyl- (9CI) (CA INDEX NAME)



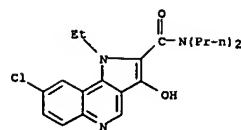
RN 156565-91-2 CAPLUS
 CN 1H-Pyrrolo[3,2-c]quinoline-2-carboxamide, 8-(dimethylamino)-3-hydroxy-1-methyl-N,N-dipropyl- (9CI) (CA INDEX NAME)



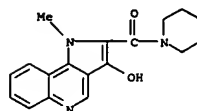
RN 156565-92-3 CAPLUS
 CN 1H-Pyrrolo[3,2-c]quinoline-2-carboxamide, 3-hydroxy-1-methyl-8-(1-piperidinylmethyl)-N,N-dipropyl- (9CI) (CA INDEX NAME)



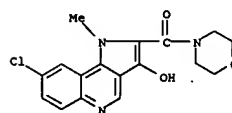
L7 ANSWER 73 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



RN 156565-87-6 CAPLUS
 CN Piperidine, 1-[(3-hydroxy-1-methyl-1H-pyrrolo[3,2-c]quinolin-2-yl)carbonyl]- (9CI) (CA INDEX NAME)



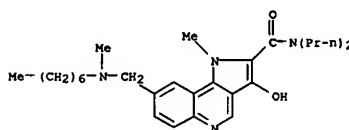
RN 156565-88-7 CAPLUS
 CN Morpholine, 4-[(8-chloro-3-hydroxy-1-methyl-1H-pyrrolo[3,2-c]quinolin-2-yl)carbonyl]- (9CI) (CA INDEX NAME)



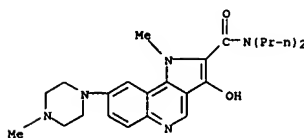
RN 156565-89-8 CAPLUS
 CN 1H-Pyrrolo[3,2-c]quinoline-2-carboxamide, 8-chloro-3-hydroxy-1-methyl-N,N-dipentyl- (9CI) (CA INDEX NAME)

L7 ANSWER 73 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

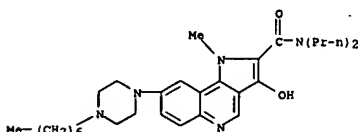
RN 156565-93-4 CAPLUS
 CN 1H-Pyrrolo[3,2-c]quinoline-2-carboxamide, 6-[(heptylamino)methyl]-3-hydroxy-1-methyl-N,N-dipropyl- (9CI) (CA INDEX NAME)



RN 156565-94-5 CAPLUS
 CN 1H-Pyrrolo[3,2-c]quinoline-2-carboxamide, 3-hydroxy-1-methyl-8-(4-methyl-1-piperazinyl)-N,N-dipropyl- (9CI) (CA INDEX NAME)

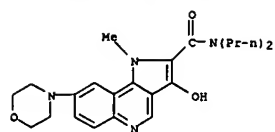


RN 156565-95-6 CAPLUS
 CN 1H-Pyrrolo[3,2-c]quinoline-2-carboxamide, 8-(4-heptyl-1-piperazinyl)-3-hydroxy-1-methyl-N,N-dipropyl- (9CI) (CA INDEX NAME)

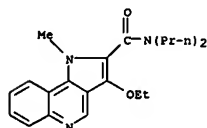


RN 156565-96-7 CAPLUS
 CN 1H-Pyrrolo[3,2-c]quinoline-2-carboxamide, 3-hydroxy-1-methyl-8-(4-morpholinyl)-N,N-dipropyl- (9CI) (CA INDEX NAME)

L7 ANSWER 73 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

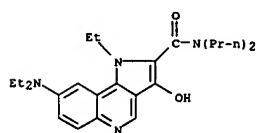


RN 156565-97-8 CAPLUS
 CN 1H-Pyrrolo[3,2-c]quinoline-2-carboxamide,
 3-ethoxy-1-methyl-N,N-dipropyl-,
 monohydrochloride (9CI) (CA INDEX NAME)



● HCl

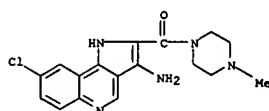
RN 156565-98-9 CAPLUS
 CN 1H-Pyrrolo[3,2-c]quinoline-2-carboxamide, 8-(diethylamino)-1-ethyl-3-
 hydroxy-N,N-dipropyl-, monohydrochloride (9CI) (CA INDEX NAME)



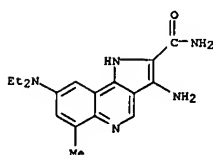
● HCl

RN 156565-99-0 CAPLUS
 CN 1H-Pyrrolo[3,2-c]quinoline-2-carboxamide, 8-(diethylamino)-3-hydroxy-1-
 (phenylmethyl)-N,N-dipropyl-, monohydrochloride (9CI) (CA INDEX NAME)

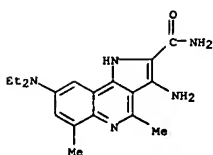
L7 ANSWER 73 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



RN 156566-03-9 CAPLUS
 CN 1H-Pyrrolo[3,2-c]quinoline-2-carboxamide, 3-amino-8-(diethylamino)-6-
 methyl- (9CI) (CA INDEX NAME)

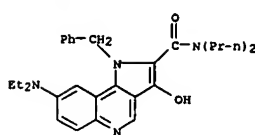


RN 156566-04-0 CAPLUS
 CN 1H-Pyrrolo[3,2-c]quinoline-2-carboxamide, 3-amino-8-(diethylamino)-4,6-
 dimethyl- (9CI) (CA INDEX NAME)



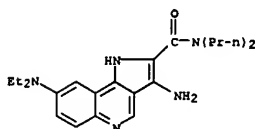
RN 156566-23-3 CAPLUS
 CN 1H-Pyrrolo[3,2-c]quinoline-2-carboxamide, 3-amino-8-(diethylamino)-4-
 methyl- (9CI) (CA INDEX NAME)

L7 ANSWER 73 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

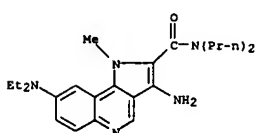


● HCl

RN 156566-00-6 CAPLUS
 CN 1H-Pyrrolo[3,2-c]quinoline-2-carboxamide, 3-amino-8-(diethylamino)-N,N-
 dipropyl- (9CI) (CA INDEX NAME)



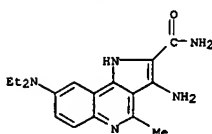
RN 156566-01-7 CAPLUS
 CN 1H-Pyrrolo[3,2-c]quinoline-2-carboxamide, 3-amino-8-(diethylamino)-1-
 methyl-N,N-dipropyl-, monohydrochloride (9CI) (CA INDEX NAME)



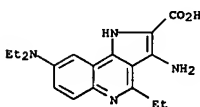
● HCl

RN 156566-02-8 CAPLUS
 CN Piperazine,
 1-[(3-amino-8-chloro-1H-pyrrolo[3,2-c]quinolin-2-yl)carbonyl]-

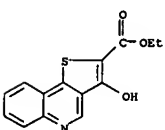
L7 ANSWER 73 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



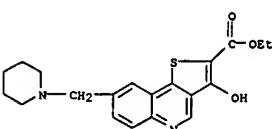
RN 156566-24-4 CAPLUS
 CN 1H-Pyrrolo[3,2-c]quinoline-2-carboxylic acid, 3-amino-8-(diethylamino)-4-
 ethyl- (9CI) (CA INDEX NAME)



RN 156566-26-6 CAPLUS
 CN Thieno[3,2-c]quinoline-2-carboxylic acid, 3-hydroxy-, ethyl ester (9CI)
 (CA INDEX NAME)

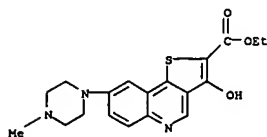


RN 156566-27-7 CAPLUS
 CN Thieno[3,2-c]quinoline-2-carboxylic acid, 3-hydroxy-8-(1-
 piperidinylmethyl)-, ethyl ester (9CI) (CA INDEX NAME)

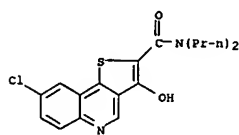


RN 156566-28-8 CAPLUS
 CN Thieno[3,2-c]quinoline-2-carboxylic acid, 3-hydroxy-8-(4-methyl-1-

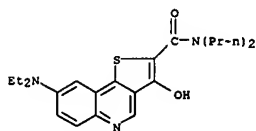
L7 ANSWER 73 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)
piperazinyl)-, ethyl ester (9CI) (CA INDEX NAME)



RN 156566-29-9 CAPLUS
CN Thieno[3,2-c]quinoline-2-carboxamide, 8-chloro-3-hydroxy-N,N-dipropyl- (9CI) (CA INDEX NAME)

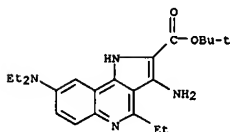


RN 156566-30-2 CAPLUS
CN Thieno[3,2-c]quinoline-2-carboxamide, 8-(diethylamino)-3-hydroxy-N,N-dipropyl- (9CI) (CA INDEX NAME)

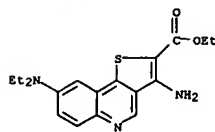


RN 156566-31-3 CAPLUS
CN Thieno[3,2-c]quinoline-2-carboxylic acid, 3-amino-8-(diethylamino)-, ethyl ester (9CI) (CA INDEX NAME)

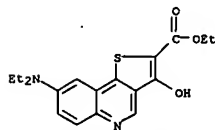
L7 ANSWER 73 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



L7 ANSWER 73 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

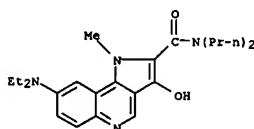


RN 156566-32-4 CAPLUS
CN Thieno[3,2-c]quinoline-2-carboxylic acid, 8-(diethylamino)-3-hydroxy-, ethyl ester (9CI) (CA INDEX NAME)



IT 156566-92-0 156565-36-5
RL: RCT (Reactant); RACT (Reactant or reagent)
reaction of, in preparation of inhibitor of biol. effects of free radicals

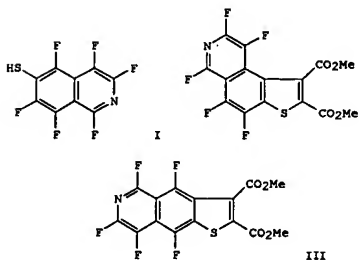
RN 156564-92-0 CAPLUS
CN 1H-Pyrrolo[3,2-c]quinoline-2-carboxamide, 8-(diethylamino)-3-hydroxy-1-methyl-N,N-dipropyl- (9CI) (CA INDEX NAME)



RN 156565-36-5 CAPLUS
CN 1H-Pyrrolo[3,2-c]quinoline-2-carboxylic acid, 3-amino-8-(diethylamino)-4-ethyl-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

L7 ANSWER 74 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN

AN 1994:508474 CAPLUS
DN 121:108474
TI Partially fluorinated heterocyclic compounds. Part 30 [1]. Cyclisation reactions of lithium 1,3,4,5,7,8-hexafluoro-6-isoquinolinethiolate and lithium 2,3,5,6,7,8-hexafluoro-4-quinolinethiolate with dimethyl acetylenedicarboxylate
AU Brooke, Gerald M.; Drury, Christopher J.
CS Chemistry Department, Science Laboratories, South Road, Durham, DH1 3LE, UK
SO Journal of Fluorine Chemistry (1994), 67(2), 143-7
CODEN: JFLCAR; ISSN: 0022-1139
DT Journal
LA English
GI

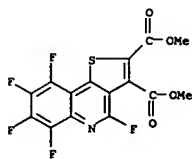


AB The Li salt of 1,3,4,5,7,8-hexafluoro-6-isoquinolinethiol (I) reacts with di-Me acetylenedicarboxylate (DMAD) to give di-Me 4,5,6,8,9-pentafluorothieno[3,2-f]isoquinoline-1,2-dicarboxylate (II) and di-Me 4,5,6,8,9-pentafluoro[2,3-g]isoquinoline-1,2-dicarboxylate (III) in the ratio 95:5, resp. The Li salt of 2,3,5,6,7,8-hexafluoro-4-quinolinethiol and DMAD give di-Me 4,6,7,8,9-pentafluorothieno[3,2-c]quinoline (74%) and di-Me 1-(2,3,5,6,7,8-hexafluoro-4-quinolylthio)ethene-1,2-dicarboxylate (13%). No cyclization to form a 6-membered ring was detected in the reaction of the Li salt of 3,4,5,7,8-pentafluoro-6-phenylthio-1-isoquinolinethiol and DMAD; overall addition of the thiol to the triple bond occurred to give di-Me 1-(3,4,5,7,8-pentafluoro-6-phenylthio-1-isoquinolylthio)ethene-1,2-dicarboxylate in low yield.

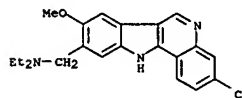
IT 156663-84-2P
RL: SPN (Synthetic preparation); PREP (Preparation)
(Preparation of)

RN 156663-84-2 CAPLUS
CN Thieno[3,2-c]quinoline-2,3-dicarboxylic acid, 4,6,7,8,9-pentafluoro-, dimethyl ester (9CI) (CA INDEX NAME)

L7 ANSWER 74 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

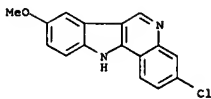


L7 ANSWER 75 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 1994:483100 CAPLUS
 DN 121:83100
 TI Conformational and structural features determining in vitro antimalarial activity in some indolo[3,2-c]quinolines, anilinoquinolines and tetrahydroindolo[3,2-d]benzazepines
 AU Koh, H. L.; Go, M. L.; Ngiam, T. I.; Mak, J. W.
 CS Dep. Pharm., Natl. Univ. Singapore, Singapore, 0511, Singapore
 SO European Journal of Medicinal Chemistry (1994), 29(2), 107-13
 CODEN: EJMCAS; ISSN: 0223-5234
 DT Journal
 LA English
 AB A series of indolo[3,2-c]quinolines, anilinoquinolines and tetrahydroindolo[3,2-d]benzazepines, which differ in the conformational planarity of the key nuclei and the distance (N...N+) between the ring and side-chain nitrogen atoms, have been synthesized and evaluated in vitro against a number of isolates of Plasmodium falciparum. The results show that differences in conformational planarity of the indolo[3,2-c]quinoline (rigid), anilinoquinoline (flexible) and tetrahydroindolo[3,2-d]benzazepine (semi-rigid) nuclei have little effect on activity. However, the N...N+ distance is an important determinant of activity and analogs with a distance comparable to the N...N+ distance of amodiaquine and chloroquine demonstrated antimalarial activity.
 IT 34374-22-6 116792-06-4
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses) (antimalarial activity of)
 RN 34374-22-6 CAPLUS
 CN 11H-Indolo[3,2-c]quinoline-9-methanamine, 3-chloro-N,N-diethyl-8-methoxy- (9CI) (CA INDEX NAME)

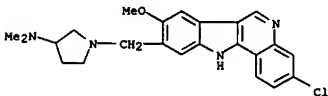


RN 116792-06-4 CAPLUS
 CN 11H-Indolo[3,2-c]quinoline, 3-chloro-8-methoxy- (9CI) (CA INDEX NAME)

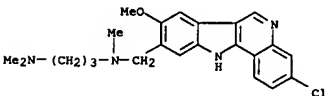
L7 ANSWER 75 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



IT 156539-87-6P 156539-88-7P 156540-03-3P
 156540-04-4P
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (preparation and antimalarial activity of)
 RN 156539-87-6 CAPLUS
 CN 3-Pyrrolidinamine, 1-[(3-chloro-8-methoxy-11H-indolo[3,2-c]quinolin-9-yl)methyl]-N,N-dimethyl- (9CI) (CA INDEX NAME)

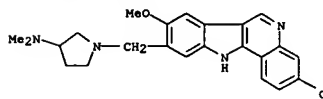


RN 156539-88-7 CAPLUS
 CN 1,3-Propanediamine, N-[(3-chloro-8-methoxy-11H-indolo[3,2-c]quinolin-9-yl)methyl]-N,N',N'-trimethyl- (9CI) (CA INDEX NAME)



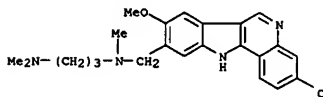
RN 156540-03-3 CAPLUS
 CN 3-Pyrrolidinamine, 1-[(3-chloro-8-methoxy-11H-indolo[3,2-c]quinolin-9-yl)methyl]-N,N-dimethyl-, hydrochloride (9CI) (CA INDEX NAME)

L7 ANSWER 75 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



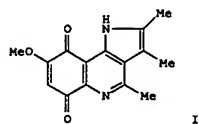
● x HCl

RN 156540-04-4 CAPLUS
 CN 1,3-Propanediamine, N-[(3-chloro-8-methoxy-11H-indolo[3,2-c]quinolin-9-yl)methyl]-N,N',N'-trimethyl-, trihydrochloride (9CI) (CA INDEX NAME)



● 3 HCl

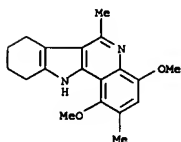
L7 ANSWER 76 OF 273 CAPLUS COPYRIGHT 2005 ACS ON STN
 AN 1994:483098 CAPLUS
 DN 121:83098
 TI Synthesis, antitumor evaluation and SAR of new
 1H-pyrrolo[3,2-c]quinoline-
 6,9-diones and 11H-indolo[3,2-c]quinoline-1,4-diones
 AU Helissey, Philippe; Cros, Suzanne; Giorgi-Renault, Sylviane
 CS Lab. Chim. Ther., Fac. Sci. Pharm. Biol., Paris, 75270, Fr.
 SO Anti-Cancer Drug Design (1994), 9(1), 51-67
 CODEN: ACDDA; ISSN: 0266-9536
 DT Journal
 LA English
 OS CASREACT 121:83098
 GI



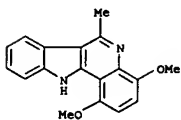
AB New 1H-pyrrolo[3,2-c]quinoline-6,9-diones, e.g., I, 11H-indolo[3,2-c]quinoline-1,4-diones and 7,8,9,10-tetrahydro-11H-indolo[3,2-c]quinoline-1,4-diones, either unsubstituted or methylated, were synthesized and evaluated for antitumor activity. They were compared to previously described quinones which bear either a methoxy group or an aziridinyl substituent on the quinone nucleus to establish structure-activity relations and to obtain compds. as active as aziridinylquinones, but with less toxicity. A new synthetic route was developed using dimethoxy deriva. as key compds. that reacted with ceric ammonium nitrate (CAN) to give quinones by oxidation demethylation. The biol. results obtained in vitro indicated that: (i) new quinones display cytotoxicity higher than that of the methoxyquinones; (ii) unsubstituted compds. are the most active; (iii) methylation of the pyrrole NH has no influence on unsubstituted quinones, but affords inactive deriva. when the quinone nucleus is methylated; (i.v.) compared to the aziridinylquinones, some compds. are equally active or more active. Despite the cytotoxicity exerted in vitro, the authors could not find evidence for any antitumor activity of quinones against in vivo P388 murine leukemia.

IT 156211-44-8P 156211-45-9P 156211-46-0P
 156211-47-1P 156211-48-2P 156211-49-3P
 156211-50-6P 156211-51-7P 156211-52-8P
 156211-53-9P 156211-54-0P 156211-55-1P
 156211-56-2P 156211-57-3P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
 (preparation and reaction of, in preparation of
 pyrroloquinolinediones and
 indoloquinolinediones)

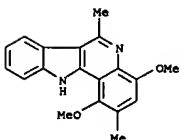
L7 ANSWER 76 OF 273 CAPLUS COPYRIGHT 2005 ACS ON STN (Continued)



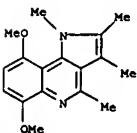
RN 156211-48-2 CAPLUS
 CN 11H-Indolo[3,2-c]quinoline, 1,4-dimethoxy-6-methyl- (9CI) (CA INDEX NAME)



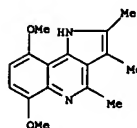
RN 156211-49-3 CAPLUS
 CN 11H-Indolo[3,2-c]quinoline, 1,4-dimethoxy-2,6-dimethyl- (9CI) (CA INDEX NAME)



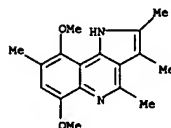
RN 156211-50-6 CAPLUS
 CN 1H-Pyrrolo[3,2-c]quinoline, 6,9-dimethoxy-1,2,3,4-tetramethyl- (9CI) (CA INDEX NAME)



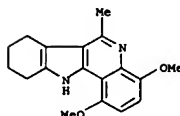
L7 ANSWER 76 OF 273 CAPLUS COPYRIGHT 2005 ACS ON STN (Continued)
 RN 156211-44-8 CAPLUS
 CN 1H-Pyrrolo[3,2-c]quinoline, 6,9-dimethoxy-2,3,4-trimethyl- (9CI) (CA INDEX NAME)



RN 156211-45-9 CAPLUS
 CN 1H-Pyrrolo[3,2-c]quinoline, 6,9-dimethoxy-2,3,4,8-tetramethyl- (9CI) (CA INDEX NAME)



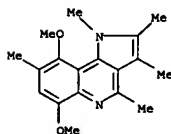
RN 156211-46-0 CAPLUS
 CN 7H-Indolo[3,2-c]quinoline, 8,9,10,11-tetrahydro-1,4-dimethoxy-6-methyl- (9CI) (CA INDEX NAME)



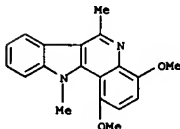
RN 156211-47-1 CAPLUS
 CN 7H-Indolo[3,2-c]quinoline, 8,9,10,11-tetrahydro-1,4-dimethoxy-2,6-dimethyl- (9CI) (CA INDEX NAME)

L7 ANSWER 76 OF 273 CAPLUS COPYRIGHT 2005 ACS ON STN (Continued)

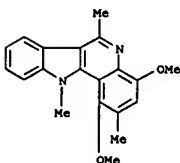
RN 156211-51-7 CAPLUS
 CN 1H-Pyrrolo[3,2-c]quinoline, 6,9-dimethoxy-1,2,3,4,8-pentamethyl- (9CI) (CA INDEX NAME)



RN 156211-52-8 CAPLUS
 CN 11H-Indolo[3,2-c]quinoline, 1,4-dimethoxy-6,11-dimethyl- (9CI) (CA INDEX NAME)

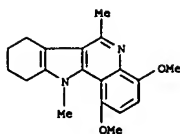


RN 156211-53-9 CAPLUS
 CN 11H-Indolo[3,2-c]quinoline, 1,4-dimethoxy-2,6,11-trimethyl- (9CI) (CA INDEX NAME)

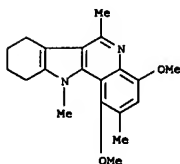


RN 156211-54-0 CAPLUS
 CN 7H-Indolo[3,2-c]quinoline, 8,9,10,11-tetrahydro-1,4-dimethoxy-6,11-dimethyl- (9CI) (CA INDEX NAME)

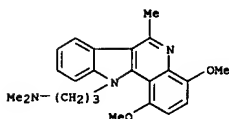
L7 ANSWER 76 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



RN 156211-55-1 CAPLUS
 CN 7H-Indolo[3,2-c]quinoline, 8,9,10,11-tetrahydro-1,4-dimethoxy-2,6,11-trimethyl- (9CI) (CA INDEX NAME)



RN 156211-56-2 CAPLUS
 CN 11H-Indolo[3,2-c]quinoline-11-propanamine, 1,4-dimethoxy-N,N,6-trimethyl- (9CI) (CA INDEX NAME)



RN 156211-57-3 CAPLUS
 CN 11H-Indolo[3,2-c]quinoline-11-propanamine, 7,8,9,10-tetrahydro-1,4-dimethoxy-N,N,6-trimethyl- (9CI) (CA INDEX NAME)

L7 ANSWER 77 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN

AN 1994:473511 CAPLUS

DN 121:73511

TI Effect of KCA-098, a new benzofuroquinoline derivative, on bone mineral metabolism

AU Kojima, Masami; Tsutsumi, Naoyuki; Nagata, Hideo; Itoh, Fumiaki; Ujii, Arai; Kawashima, Kohtarō; Endo, Hiroyoshi; Okazaki, Mitsuo
 CS Cent. Res. Lab., Kissei Pharm. Co., Ltd., Nagano, 399-83, Japan
 SO Biological & Pharmaceutical Bulletin (1994), 17(4), 504-8
 CODEN: BPBLEO; ISSN: 0918-6158

DT Journal

LA English

AB The effect of 3,9-bis(N,N-dimethylcarbamoyloxy)-5H-benzofuro[3,2-c]quinolin-6-one (KCA-098) on mineral metabolism by chick embryonic bone

was examined. KCA-098 concentration-dependently inhibited bone resorption by cultured chick embryonic femora and calvaria. It increased the length, dry weight, and the Ca and P contents of 9-day-old chick embryonic femurs cultivated for 6 days, indicating that it stimulated bone formation. These results show that KCA-098 has the unique effect of inhibiting bone resorption and stimulating bone formation by chick embryos. In vivo, oral

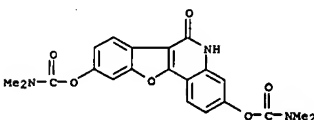
administration of KCA-098 (3.0 mg/kg/day) for 16 wk to ovariectomized rats led to an increase in femoral Ca and P contents as well as to an increase in the amount of force required to break the femur, suggesting that the compound may be useful for the treatment of bone diseases.

IT 129794-24-7, KCA 098

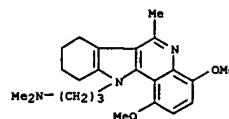
RL: BIOL (Biological study)
 (bone mineral metabolism response to)

RN 129794-24-7 CAPLUS

CN Carbamic acid, dimethyl-, 5,6-dihydro-6-oxobenzofuro[3,2-c]quinoline-3,9-diyl ester (9CI) (CA INDEX NAME)



L7 ANSWER 76 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



L7 ANSWER 78 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN

AN 1994:323302 CAPLUS

DN 120:323302

TI Antimalarial drugs. 65. Structure-activity relationships of antimalarial indolo[3,2-c]quinolines

AU Werbel, L. M.; Kesten, S. J.; Turner, W. R.
 CS Parke-Davis Pharm. Res., Warner-Lambert Co., Ann Arbor, MI, 48106, USA
 SO European Journal of Medicinal Chemistry (1993), 28(11), 837-52
 CODEN: EJMCAS; ISSN: 0223-5234

DT Journal

LA English

GI

GI

GI

GI

GI

GI

GI

GI

GI

GI

GI

GI

GI

GI

GI

GI

GI

GI

GI

GI

GI

GI

GI

GI

GI

GI

GI

GI

GI

GI

GI

GI

GI

GI

GI

GI

GI

GI

GI

GI

GI

GI

GI

GI

GI

GI

GI

GI

GI

GI

GI

GI

GI

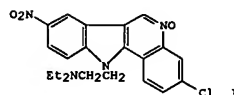
GI

GI

GI

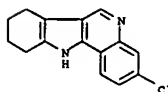
GI

GI



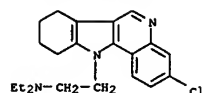
AB Structure-activity relationships have been ascertained and chemical methodol. developed for a series of antimalarial 3-chloroindolo[3,2-c]quinoline 5-oxides. The basic side chain as well as the ring N-oxide are critical for antimalarial activity as is a bromine or chlorine in position 3. Substitution at positions 7, 8, 9, 10 is not essential, although the most potent analog in the authors' studies was the 8-nitro compound I.

IT 68499-90-1P 155250-03-6P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
 (preparation and reaction of, in preparation of antimalarial indoloquinolines)
 RN 68499-90-1 CAPLUS
 CN 7H-Indolo[3,2-c]quinoline, 3-chloro-8,9,10,11-tetrahydro- (9CI) (CA INDEX NAME)

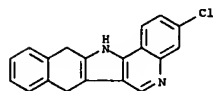


RN 155250-03-6 CAPLUS
 CN 11H-Indolo[3,2-c]quinoline-11-ethanamine, 3-chloro-N,N-diethyl-7,8,9,10-tetrahydro- (9CI) (CA INDEX NAME)

L7 ANSWER 78 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

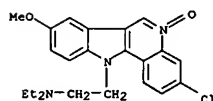


IT 155250-04-7P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation of)
 RN 155250-04-7 CAPLUS
 CN 7H-Benz[5,6]indolo[3,2-c]quinoline, 3-chloro-12,13-dihydro- (9CI) (CA INDEX NAME)

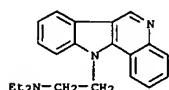


IT 4295-45-8P 65287-52-7P 65287-55-0P
 65287-57-2P 65287-59-4P 65287-62-9P
 65287-63-0P 65287-65-2P 116618-53-2P
 116792-06-4P 116792-07-5P 155249-37-9P
 155249-38-0P 155249-39-1P 155249-40-4P
 155249-41-5P 155249-42-6P 155249-43-7P
 155249-44-8P 155249-45-9P 155249-46-0P
 155249-47-1P 155249-48-2P 155249-49-3P
 155249-50-6P 155249-51-7P 155249-52-8P
 155249-53-9P 155249-54-0P 155249-55-1P
 155249-56-2P 155249-57-3P 155249-58-4P
 155249-59-5P 155249-60-8P 155249-61-9P
 155249-62-0P 155249-63-1P 155249-64-2P
 155249-65-3P 155249-66-4P 155249-67-5P
 155249-68-6P 155249-69-7P 155249-70-0P
 155249-71-1P 155249-72-2P 155249-73-3P
 155249-74-4P 155249-75-5P 155249-76-6P
 155249-77-7P 155249-78-8P 155249-79-9P
 155249-80-2P 155249-81-3P 155249-82-4P
 155249-83-5P 155249-84-6P 155249-85-7P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation of, as antimalarial)
 RN 4295-45-8 CAPLUS
 CN 11H-Indolo[3,2-c]quinoline, 2-methoxy- (7CI, 8CI, 9CI) (CA INDEX NAME)

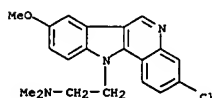
L7 ANSWER 78 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



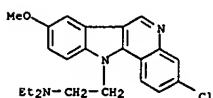
RN 65287-62-9 CAPLUS
 CN 11H-Indolo[3,2-c]quinoline-11-ethanamine, N,N-diethyl- (9CI) (CA INDEX NAME)



RN 65287-63-0 CAPLUS
 CN 11H-Indolo[3,2-c]quinoline-11-ethanamine, 3-chloro-8-methoxy-N,N-dimethyl- (9CI) (CA INDEX NAME)

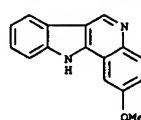


RN 65287-65-2 CAPLUS
 CN 11H-Indolo[3,2-c]quinoline-11-ethanamine, 3-chloro-N,N-diethyl-8-methoxy- (9CI) (CA INDEX NAME)

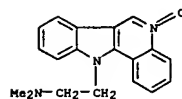


RN 116618-53-2 CAPLUS
 CN 11H-Indolo[3,2-c]quinoline, 8-methoxy-11-methyl-, 5-oxide (9CI) (CA INDEX NAME)

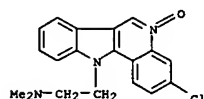
L7 ANSWER 78 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



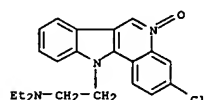
RN 65287-52-7 CAPLUS
 CN 11H-Indolo[3,2-c]quinoline-11-ethanamine, N,N-dimethyl-, 5-oxide (9CI) (CA INDEX NAME)



RN 65287-55-0 CAPLUS
 CN 11H-Indolo[3,2-c]quinoline-11-ethanamine, 3-chloro-N,N-dimethyl-, 5-oxide (9CI) (CA INDEX NAME)

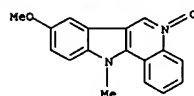


RN 65287-57-2 CAPLUS
 CN 11H-Indolo[3,2-c]quinoline-11-ethanamine, 3-chloro-N,N-diethyl-, 5-oxide (9CI) (CA INDEX NAME)

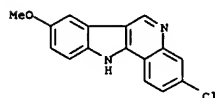


RN 65287-59-4 CAPLUS
 CN 11H-Indolo[3,2-c]quinoline-11-ethanamine, 3-chloro-N,N-diethyl-8-methoxy-,

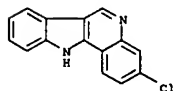
L7 ANSWER 78 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



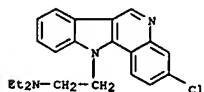
RN 116792-06-4 CAPLUS
 CN 11H-Indolo[3,2-c]quinoline, 3-chloro-8-methoxy- (9CI) (CA INDEX NAME)



RN 116792-07-5 CAPLUS
 CN 11H-Indolo[3,2-c]quinoline, 3-chloro- (9CI) (CA INDEX NAME)

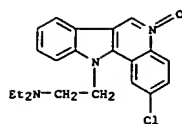


RN 155249-37-9 CAPLUS
 CN 11H-Indolo[3,2-c]quinoline-11-ethanamine, 3-chloro-N,N-diethyl- (9CI) (CA INDEX NAME)

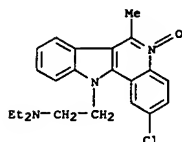


RN 155249-38-0 CAPLUS
 CN 11H-Indolo[3,2-c]quinoline-11-ethanamine, 2-chloro-N,N-diethyl-, 5-oxide (9CI) (CA INDEX NAME)

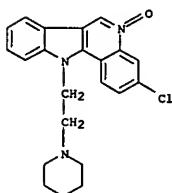
L7 ANSWER 78 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



RN 155249-39-1 CAPLUS
CN 11H-Indolo[3,2-c]quinoline-11-ethanamine, 2-chloro-N,N-diethyl-6-methyl-, 5-oxide (9CI) (CA INDEX NAME)

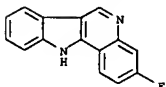


RN 155249-40-4 CAPLUS
CN 11H-Indolo[3,2-c]quinoline, 3-chloro-11-[2-(1-piperidinyl)ethyl]-, 5-oxide (9CI) (CA INDEX NAME)

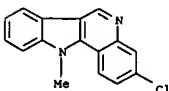


RN 155249-41-5 CAPLUS
CN 11H-Indolo[3,2-c]quinoline-11-ethanamine, N,N-diethyl-, N,5-dioxide (9CI) (CA INDEX NAME)

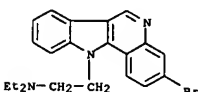
L7 ANSWER 78 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



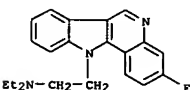
RN 155249-46-0 CAPLUS
CN 11H-Indolo[3,2-c]quinoline, 3-chloro-11-methyl-, 5-oxide (9CI) (CA INDEX NAME)



RN 155249-47-1 CAPLUS
CN 11H-Indolo[3,2-c]quinoline-11-ethanamine, 3-bromo-N,N-diethyl-, 5-oxide (9CI) (CA INDEX NAME)

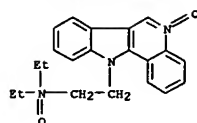


RN 155249-48-2 CAPLUS
CN 11H-Indolo[3,2-c]quinoline-11-ethanamine, N,N-diethyl-3-fluoro-, N,5-dioxide (9CI) (CA INDEX NAME)

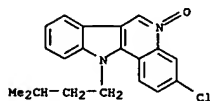


RN 155249-49-3 CAPLUS
CN 11H-Indolo[3,2-c]quinoline-11-ethanamine, 3-bromo-N,N-diethyl-, N,5-dioxide (9CI) (CA INDEX NAME)

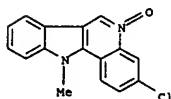
L7 ANSWER 78 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



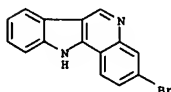
RN 155249-42-6 CAPLUS
CN 11H-Indolo[3,2-c]quinoline, 3-chloro-11-(3-methylbutyl)-, 5-oxide (9CI) (CA INDEX NAME)



RN 155249-43-7 CAPLUS
CN 11H-Indolo[3,2-c]quinoline, 3-chloro-11-methyl-, 5-oxide (9CI) (CA INDEX NAME)

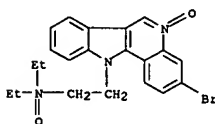


RN 155249-44-8 CAPLUS
CN 11H-Indolo[3,2-c]quinoline, 3-bromo-, 5-oxide (9CI) (CA INDEX NAME)

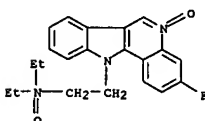


RN 155249-45-9 CAPLUS
CN 11H-Indolo[3,2-c]quinoline, 3-fluoro-, 5-oxide (9CI) (CA INDEX NAME)

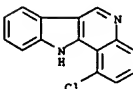
L7 ANSWER 78 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



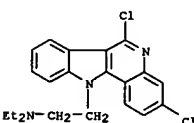
RN 155249-50-6 CAPLUS
CN 11H-Indolo[3,2-c]quinoline-11-ethanamine, N,N-diethyl-3-fluoro-, N,5-dioxide (9CI) (CA INDEX NAME)



RN 155249-51-7 CAPLUS
CN 11H-Indolo[3,2-c]quinoline, 1-chloro-, 5-oxide (9CI) (CA INDEX NAME)

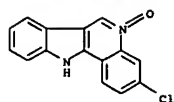


RN 155249-52-8 CAPLUS
CN 11H-Indolo[3,2-c]quinoline-11-ethanamine, 3,6-dichloro-N,N-diethyl-, 5-oxide (9CI) (CA INDEX NAME)

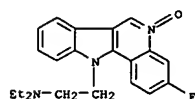


RN 155249-53-9 CAPLUS
CN 11H-Indolo[3,2-c]quinoline, 3-chloro-, 5-oxide (9CI) (CA INDEX NAME)

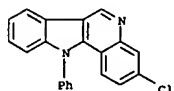
L7 ANSWER 78 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



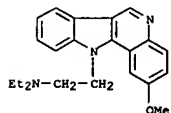
RN 155249-54-0 CAPLUS
CN 11H-Indolo[3,2-c]quinoline-11-ethanamine, N,N-diethyl-3-fluoro-, 5-oxide (9CI) (CA INDEX NAME)



RN 155249-55-1 CAPLUS
CN 11H-Indolo[3,2-c]quinoline, 3-chloro-11-phenyl- (9CI) (CA INDEX NAME)

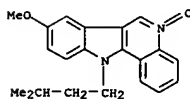


RN 155249-56-2 CAPLUS
CN 11H-Indolo[3,2-c]quinoline-11-ethanamine, N,N-diethyl-2-methoxy-, (CA INDEX NAME)

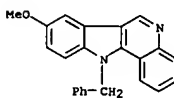


RN 155249-57-3 CAPLUS
CN 11H-Indolo[3,2-c]quinoline-11-ethanamine, N,N-diethyl-2-methoxy-, N,5-dioxide (9CI) (CA INDEX NAME)

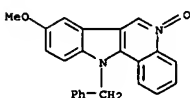
L7 ANSWER 78 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



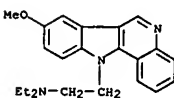
RN 155249-62-0 CAPLUS
CN 11H-Indolo[3,2-c]quinoline, 8-methoxy-11-(phenylmethyl)- (9CI) (CA INDEX NAME)



RN 155249-63-1 CAPLUS
CN 11H-Indolo[3,2-c]quinoline, 8-methoxy-11-(phenylmethyl)-, 5-oxide (9CI) (CA INDEX NAME)

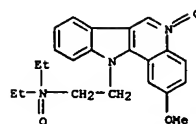


RN 155249-64-2 CAPLUS
CN 11H-Indolo[3,2-c]quinoline-11-ethanamine, N,N-diethyl-8-methoxy-, (CA INDEX NAME)

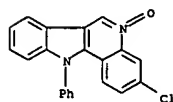


RN 155249-65-3 CAPLUS
CN 11H-Indolo[3,2-c]quinoline, 11-butyl-8-methoxy- (9CI) (CA INDEX NAME)

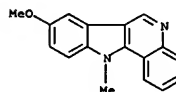
L7 ANSWER 78 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



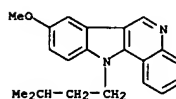
RN 155249-58-4 CAPLUS
CN 11H-Indolo[3,2-c]quinoline, 3-chloro-11-phenyl-, 5-oxide (9CI) (CA INDEX NAME)



RN 155249-59-5 CAPLUS
CN 11H-Indolo[3,2-c]quinoline, 8-methoxy-11-methyl- (9CI) (CA INDEX NAME)

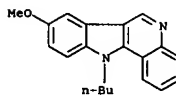


RN 155249-60-8 CAPLUS
CN 11H-Indolo[3,2-c]quinoline, 8-methoxy-11-(3-methylbutyl)- (9CI) (CA INDEX NAME)

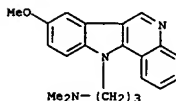


RN 155249-61-9 CAPLUS
CN 11H-Indolo[3,2-c]quinoline, 8-methoxy-11-(3-methylbutyl)-, 5-oxide (9CI)

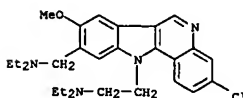
L7 ANSWER 78 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



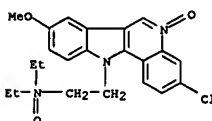
RN 155249-66-4 CAPLUS
CN 11H-Indolo[3,2-c]quinoline-11-propanamine, 8-methoxy-N,N-dimethyl- (9CI) (CA INDEX NAME)



RN 155249-67-5 CAPLUS
CN 11H-Indolo[3,2-c]quinoline-11-ethanamine, 3-chloro-9-[(diethylamino)methyl]-N,N-diethyl-8-methoxy- (9CI) (CA INDEX NAME)

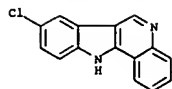


RN 155249-68-6 CAPLUS
CN 11H-Indolo[3,2-c]quinoline-11-ethanamine, 3-chloro-N,N-diethyl-8-methoxy-, N,5-dioxide (9CI) (CA INDEX NAME)

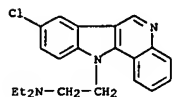


RN 155249-69-7 CAPLUS
CN 11H-Indolo[3,2-c]quinoline, 8-chloro- (9CI) (CA INDEX NAME)

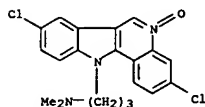
L7 ANSWER 78 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



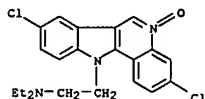
RN 155249-70-0 CAPLUS
CN 11H-Indolo[3,2-c]quinoline-11-ethanamine, 8-chloro-N,N-diethyl- (9CI)
(CA INDEX NAME)



RN 155249-71-1 CAPLUS
CN 11H-Indolo[3,2-c]quinoline-11-propanamine, 3,8-dichloro-N,N-dimethyl-, 5-oxide (9CI) (CA INDEX NAME)

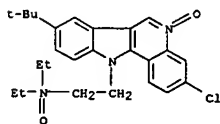


RN 155249-72-2 CAPLUS
CN 11H-Indolo[3,2-c]quinoline-11-ethanamine, 3,8-dichloro-N,N-diethyl-, 5-oxide (9CI) (CA INDEX NAME)

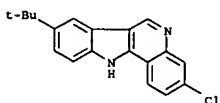


RN 155249-73-3 CAPLUS
CN 11H-Indolo[3,2-c]quinoline-11-ethanamine, 3,8-dichloro-N,N-diethyl-, 5-oxide (9CI) (CA INDEX NAME)

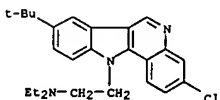
L7 ANSWER 78 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



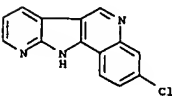
RN 155249-77-7 CAPLUS
CN 11H-Indolo[3,2-c]quinoline, 3-chloro-8-(1,1-dimethylethyl)- (9CI) (CA INDEX NAME)



RN 155249-78-8 CAPLUS
CN 11H-Indolo[3,2-c]quinoline-11-ethanamine, 3-chloro-8-(1,1-dimethylethyl)-N,N-diethyl- (9CI) (CA INDEX NAME)

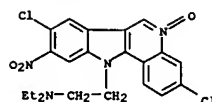


RN 155249-79-9 CAPLUS
CN 10H-Pyrido[3',2':4,5]pyrrolo[3,2-c]quinoline, 3-chloro- (9CI) (CA INDEX NAME)

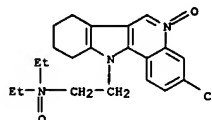


RN 155249-80-2 CAPLUS
CN 11H-Pyrido[3',2':4,5]pyrrolo[3,2-c]quinoline-11-ethanamine, 3-chloro-N,N-diethyl- (9CI) (CA INDEX NAME)

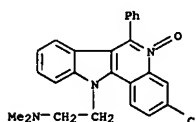
L7 ANSWER 78 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



RN 155249-74-4 CAPLUS
CN 11H-Indolo[3,2-c]quinoline-11-ethanamine, 3-chloro-N,N-diethyl-, 7,8,9,10-tetrahydro-, N,5-dioxide (9CI) (CA INDEX NAME)

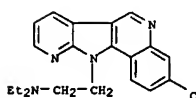


RN 155249-75-5 CAPLUS
CN 11H-Indolo[3,2-c]quinoline-11-ethanamine, 3-chloro-N,N-dimethyl-6-phenyl-, 5-oxide (9CI) (CA INDEX NAME)

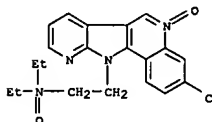


RN 155249-76-6 CAPLUS
CN 11H-Indolo[3,2-c]quinoline-11-ethanamine, 3-chloro-8-(1,1-dimethylethyl)-N,N-diethyl-, N,5-dioxide (9CI) (CA INDEX NAME)

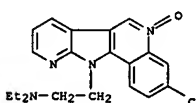
L7 ANSWER 78 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



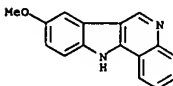
RN 155249-81-3 CAPLUS
CN 11H-Pyrido[3',2':4,5]pyrrolo[3,2-c]quinoline-11-ethanamine, 3-chloro-N,N-diethyl-, N,5-dioxide (9CI) (CA INDEX NAME)



RN 155249-82-4 CAPLUS
CN 11H-Pyrido[3',2':4,5]pyrrolo[3,2-c]quinoline-11-ethanamine, 3-chloro-N,N-diethyl-, 5-oxide (9CI) (CA INDEX NAME)

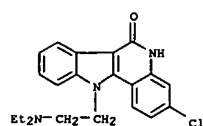


RN 155249-83-5 CAPLUS
CN 11H-Indolo[3,2-c]quinoline, 8-methoxy- (9CI) (CA INDEX NAME)

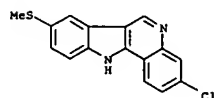


RN 155249-84-6 CAPLUS
CN 6H-Indolo[3,2-c]quinolin-6-one, 3-chloro-11-(2-(diethylamino)ethyl)-5,11-dihydro- (9CI) (CA INDEX NAME)

L7 ANSWER 78 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

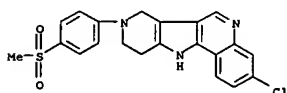


RN 155249-85-7 CAPLUS
CN 11H-Indolo[3,2-c]quinoline, 3-chloro-8-(methylthio)- (9CI) (CA INDEX NAME)

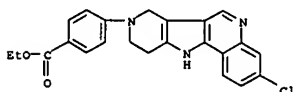


L7 ANSWER 79 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

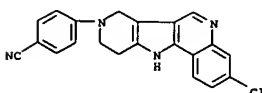
CN 7H-Pyrido[3',4':4,5]pyrrolo[3,2-c]quinoline, 3-chloro-8,9,10,11-tetrahydro-8-(4-(methylsulfonyl)phenyl)- (9CI) (CA INDEX NAME)



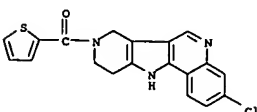
RN 154197-64-5 CAPLUS
CN Benzoic acid, 4-(3-chloro-7,9,10,11-tetrahydro-8H-pyrido[3',4':4,5]pyrrolo[3,2-c]quinolin-8-yl)-, ethyl ester (9CI) (CA INDEX NAME)



RN 154197-65-6 CAPLUS
CN Benzonitrile, 4-(3-chloro-7,9,10,11-tetrahydro-8H-pyrido[3',4':4,5]pyrrolo[3,2-c]quinolin-8-yl)- (9CI) (CA INDEX NAME)



RN 154197-66-7 CAPLUS
CN 7H-Pyrido[3',4':4,5]pyrrolo[3,2-c]quinoline, 3-chloro-8,9,10,11-tetrahydro-8-(2-thienylcarbonyl)- (9CI) (CA INDEX NAME)

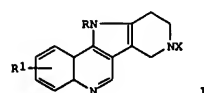


RN 154197-67-8 CAPLUS
CN 7H-Pyrido[3',4':4,5]pyrrolo[3,2-c]quinoline, 3-chloro-8-(4-cyanobenzoyl)-8,9,10,11-tetrahydro- (9CI) (CA INDEX NAME)

L7 ANSWER 79 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN

AN 1994:270359 CAPLUS
DN 120:270359
TI Preparation of substituted tetrahydropyrido[3',4':4,5]pyrrolo[3,2-c]quinolines
IN Skotnicki, Jerald S.; Kearney, Robert M.
PA American Home Products Corp., USA
SO U.S., 9 pp.
CODEN: USXXAM
DT Patent
LA English
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5281608	A	19940125	US 1992-936827	19920828
US 1992-936827		19920828		
MARPAT 120:270359				



AB Title compds. I (R = H, alkyl, Ph; R1 = H, alkyl, Ph, halo, HO, alkoxy, F3C; R2 = Ph, phenylalkyl, chienyl, furyl, pyrrolyl, pyridyl, benzothienyl, benzofuryl, indolyl, quinolyl, or any of the foregoing substituted with halo, alkyl, alkylcarbonyl, benzoyl, carboxy, alkoxycarbonyl, R3O, (R3)2N, (R3)2NCO, PhSO2, alkylsulfonyl, NC, O2N, F3C,

wherein R3 = H, alkyl, Ph; R4 = alkyl; X = R2, R2O2C, R4O2C, R4NH; C, etc.; Y = O, S) which, by virtue of their ability to inhibit interleukin 1, and to modify the balance between bone production and bone resorption, are

useful as antiinflammatory agents, and in treatment of osteoporosis, are prepared I (R = X = H, R1 = 3-Cl, p-FC6H4SO2Me), 4-methylmorpholine N-oxide, Cs2CO3 and DMSO were stirred overnight at 80° to give after cooling and dilution with H2O I [R = H, R1 = 3-Cl, X = 4-(MeSO2)C6H4]

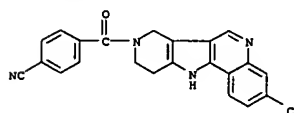
which at 10 μM inhibited interleukin 1 40%.

IT 150096-36-9P 154197-64-5P 154197-65-6P
154197-66-7P 154197-67-8P 154197-68-9P
154197-69-0P 154197-70-3P 154197-71-4P
154197-72-5P 154197-73-6P 154197-74-7P
154197-75-8P 154197-76-9P 154197-77-0P
154197-78-1P 154197-79-2P 154197-80-5P
154197-81-6P 154197-82-7P 154197-83-8P

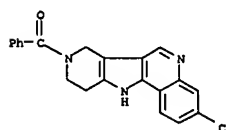
RL: PREP (Preparation)
(prepare of, as antiinflammatory agent and for treatment of osteoporosis)

RN 150096-36-9 CAPLUS

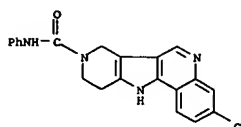
L7 ANSWER 79 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



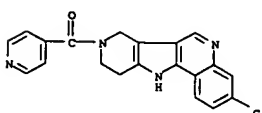
RN 154197-68-9 CAPLUS
CN 7H-Pyrido[3',4':4,5]pyrrolo[3,2-c]quinoline, 8-benzoyl-3-chloro-8,9,10,11-tetrahydro- (9CI) (CA INDEX NAME)



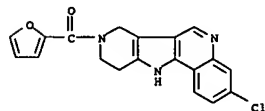
RN 154197-69-0 CAPLUS
CN 8H-Pyrido[3',4':4,5]pyrrolo[3,2-c]quinoline-8-carboxamide, 3-chloro-7,9,10,11-tetrahydro-N-phenyl- (9CI) (CA INDEX NAME)



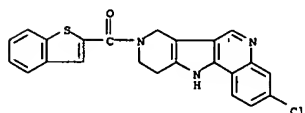
RN 154197-70-3 CAPLUS
CN 7H-Pyrido[3',4':4,5]pyrrolo[3,2-c]quinoline, 3-chloro-8,9,10,11-tetrahydro-8-(4-pyridinylcarbonyl)- (9CI) (CA INDEX NAME)



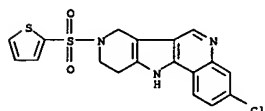
L7 ANSWER 79 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)
 RN 154197-71-4 CAPLUS
 CN 7H-Pyrido[3',4':4,5]pyrrolo[3,2-c]quinoline, 3-chloro-8-(2-furanylcarbonyl)-8,9,10,11-tetrahydro- (9CI) (CA INDEX NAME)



RN 154197-72-5 CAPLUS
 CN 7H-Pyrido[3',4':4,5]pyrrolo[3,2-c]quinoline, 8-(benzo[b]thien-2-ylcarbonyl)-3-chloro-8,9,10,11-tetrahydro- (9CI) (CA INDEX NAME)

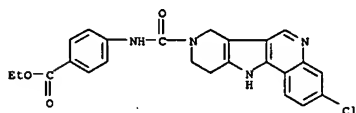


RN 154197-73-6 CAPLUS
 CN 7H-Pyrido[3',4':4,5]pyrrolo[3,2-c]quinoline, 3-chloro-8,9,10,11-tetrahydro-8-(2-thienylsulfonyl)- (9CI) (CA INDEX NAME)

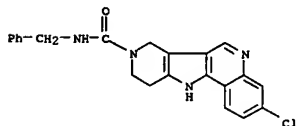


RN 154197-74-7 CAPLUS
 CN 8H-Pyrido[3',4':4,5]pyrrolo[3,2-c]quinoline-8-carboxylic acid, 3-chloro-7,9,10,11-tetrahydro-, phenyl ester (9CI) (CA INDEX NAME)

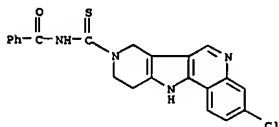
L7 ANSWER 79 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



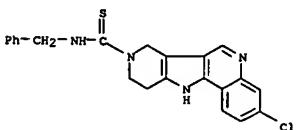
RN 154197-78-1 CAPLUS
 CN 8H-Pyrido[3',4':4,5]pyrrolo[3,2-c]quinoline-8-carboxamide, 3-chloro-7,9,10,11-tetrahydro-N-(phenylmethyl)- (9CI) (CA INDEX NAME)



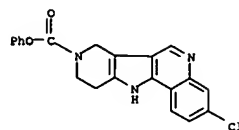
RN 154197-79-2 CAPLUS
 CN Benzamide, N-[(3-chloro-7,9,10,11-tetrahydro-8H-pyrido[3',4':4,5]pyrrolo[3,2-c]quinolin-8-yl)thioxomethyl]- (9CI) (CA INDEX NAME)



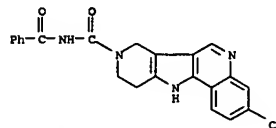
RN 154197-80-5 CAPLUS
 CN 8H-Pyrido[3',4':4,5]pyrrolo[3,2-c]quinoline-8-carbothioamide, 3-chloro-7,9,10,11-tetrahydro-N-(phenylmethyl)- (9CI) (CA INDEX NAME)



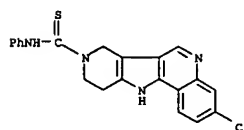
L7 ANSWER 79 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



RN 154197-75-8 CAPLUS
 CN 8H-Pyrido[3',4':4,5]pyrrolo[3,2-c]quinoline-8-carboxamide, N-benzoyl-3-chloro-7,9,10,11-tetrahydro- (9CI) (CA INDEX NAME)



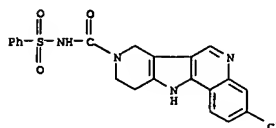
RN 154197-76-9 CAPLUS
 CN 8H-Pyrido[3',4':4,5]pyrrolo[3,2-c]quinoline-8-carbothioamide, 3-chloro-7,9,10,11-tetrahydro-N-phenyl- (9CI) (CA INDEX NAME)



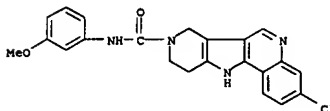
RN 154197-77-0 CAPLUS
 CN Benzoic acid, 4-[[[3-chloro-7,9,10,11-tetrahydro-8H-pyrido[3',4':4,5]pyrrolo[3,2-c]quinolin-8-yl)carbonyl]amino]-, ethyl ester (9CI) (CA INDEX NAME)

L7 ANSWER 79 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

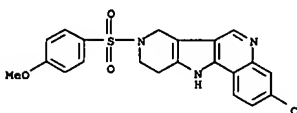
RN 154197-81-6 CAPLUS
 CN 8H-Pyrido[3',4':4,5]pyrrolo[3,2-c]quinoline-8-carboxamide, 3-chloro-7,9,10,11-tetrahydro-N-(phenylsulfonyl)- (9CI) (CA INDEX NAME)



RN 154197-82-7 CAPLUS
 CN 8H-Pyrido[3',4':4,5]pyrrolo[3,2-c]quinoline-8-carboxamide, 3-chloro-7,9,10,11-tetrahydro-N-(3-methoxyphenyl)- (9CI) (CA INDEX NAME)



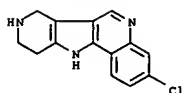
RN 154197-83-8 CAPLUS
 CN 7H-Pyrido[3',4':4,5]pyrrolo[3,2-c]quinoline, 3-chloro-8,9,10,11-tetrahydro-8-[(4-methoxyphenyl)sulfonyl]- (9CI) (CA INDEX NAME)



IT 117767-10-9
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (reaction of, in preparation of antiinflammatory agents and for treatment of osteoporosis)

RN 117767-10-9 CAPLUS
 CN 7H-Pyrido[3',4':4,5]pyrrolo[3,2-c]quinoline, 3-chloro-8,9,10,11-tetrahydro- (9CI) (CA INDEX NAME)

L7 ANSWER 79 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



L7 ANSWER 80 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN

AN 1994:106972 CAPLUS

DN 120:106972

TI Biheterocyclic agrochemical fungicidal compounds

IN Mellor, Michael; Riordan, Peter Dominic

PA Schering Agrochemicals Ltd., UK

SO PCT Int. Appl., 62 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9313664	A2	19930722	WO 1993-GB29	19930108
<--				
W: AU, BG, BR, CA, FI, HU, JP, KR, NO, NZ, PL, RO, RU, SD, UA, US				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, SN, TD, TG				
AU 9332625	A1	19930803	AU 1993-32625	19930108
<--				
CN 1076697	A	19930929	CN 1993-101723	19930111
<--				
PRAI GB 1992-557	A	19920111		
GB 1992-13145	A	19920620		
GB 1992-13148	A	19920620		
WO 1993-GB29	A	19930108		

OS MARPAT 120:106972

GI For diagram(s), see printed CA Issue.

AB The title comps. I [ring A is an (un)substituted 6-member ring

containing 1

or 2 atoms: R1 = Q, CN, halogen, NO2; Q = H, (un)substituted acyl, (un)substituted alkyl, (un)substituted cycloalkyl, (un)substituted alkenyl, etc.; R2 = Q, SiR3R4R5, etc.; R3-R5 = H, (un)substituted alkyl, (un)substituted cycloalkyl, (un)substituted alkenyl, (un)substituted alkynyl, etc.; X = O, S, NR3; Z = S(O)n, O; n = 0-2; when X = O or NR3, then R2 may also be NR4R5, or when X = NR3, then R2 can also be OR4, useful for combating phytopathogenic fungi, are prepared. Thus, iso-Pr 2-chloronicotinate and iso-Pr mercaptoacetate were reacted together, forming iso-Pr 2-(isopropoxycarbonylmethylthio)nicotinate, which was treated with NaH for 19 h, producing iso-Pr

3-hydroxythieno[2,3-b]pyridine-

2-carboxylate (II), m.p. 79-81°. II demonstrated fungicidal activity against apple scab (i.e., Venturia inaequalis).

IT 152525-71-8P

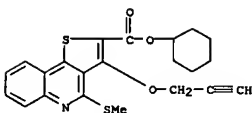
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation and agrochem. fungicidal activity of)

RN 152525-71-8 CAPLUS

CN Thieno[3,2-c]quinoline-2-carboxylic acid,

4-(methylthio)-3-(2-propynyloxy)-, cyclohexyl ester (9CI) (CA INDEX NAME)

L7 ANSWER 80 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

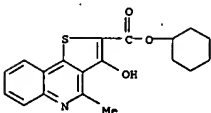


IT 152525-52-5P 152525-56-9P 152525-59-2P

RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation and agrochem. fungicidal activity of)

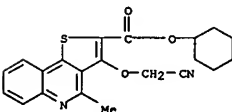
RN 152525-52-5 CAPLUS

CN Thieno[3,2-c]quinoline-2-carboxylic acid, 3-hydroxy-4-methyl-, cyclohexyl ester (9CI) (CA INDEX NAME)



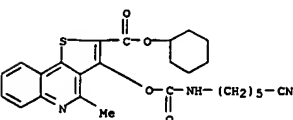
RN 152525-56-9 CAPLUS

CN Thieno[3,2-c]quinoline-2-carboxylic acid, 3-(cyanomethoxy)-4-methyl-, cyclohexyl ester (9CI) (CA INDEX NAME)



RN 152525-59-2 CAPLUS

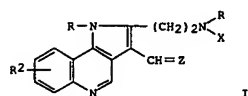
CN Thieno[3,2-c]quinoline-2-carboxylic acid, 3-[[[5-cyanopentyl]amino]carbonyloxy]-4-methyl-, cyclohexyl ester (9CI) (CA INDEX NAME)



L7 ANSWER 80 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

L7 ANSWER 81 OF 273 CAPLUS COPYRIGHT 2005 ACS ON STN
 AN 1993:580752 CAPLUS
 DN 119:180752
 TI Substituted pyrrolo[3,2-c]quinoline interleukin I inhibitors
 IN Skotnicki, Jerald S.; Kearney, Robert M.
 PA American Home Products Corp., USA
 SO U.S., 6 pp.
 CODEN: USXXAM
 DT Patent
 LA English
 FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI US 5216162	A	19930601	US 1992-936825	19920828
PRAI US 1992-936825		19920828		
OS MARPAT 119:180752				
GI				

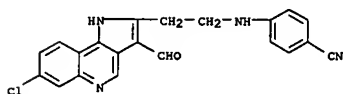


AB The title compds. I [R = H, lower alkyl; R2 = H, lower alkyl, Ph, halogen, lower alkoxy, HO, CF3; X = R1, C(:Y)R1, C(:Y)R3, SO2R1, SO2R3; R1 = (un)substituted pyridyl, indolyl, quinolinyl, Ph, thienyl, furyl, etc.; R3 = lower alkyl, Ph; Y = O, S; Z = O, NNHR4, NNHR1, NOR4, NOR1, NOCH2R1, etc.; R4 = H, lower alkyl, Ph], which inhibit the release of interleukin 1, and are of use as antiinflammatory agents and in the treatment of disease states involving enzymic tissue destruction (no data), are prepared

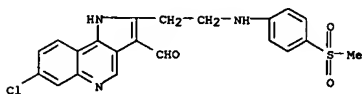
Thus, 3-chloro-8,9,10,11-tetrahydro-7H-pyrrolo[3,2-c]quinoline was condensed with p-fluorophenylmethylsulfone, and the intermediate refluxed in the presence of PhNHNH2, producing 7-chloro-2-[2-[[4-(methylsulfonyl)phenyl]amino]ethyl]-1H-pyrrolo[3,2-c]quinoline-3-carboxaldehyde phenylhydrazone (II). II demonstrated 80% inhibition of protease secretion from rabbit articular chondrocytes at concentration 10 µM.

IT 150096-34-7B 150096-37-OP 150096-38-1P
 150096-39-2P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation and interleukin I inhibitory activity of)
 RN 150096-34-7 CAPLUS
 CN Benzoic acid, 4-[[2-(7-chloro-3-formyl-1H-pyrrolo[3,2-c]quinolin-2-yl)ethyl]amino]-, ethyl ester (9CI) (CA INDEX NAME)

L7 ANSWER 81 OF 273 CAPLUS COPYRIGHT 2005 ACS ON STN (Continued)
 RN 150096-33-6 CAPLUS
 CN Benzonitrile, 4-[[2-(7-chloro-3-formyl-1H-pyrrolo[3,2-c]quinolin-2-yl)ethyl]amino]- (9CI) (CA INDEX NAME)

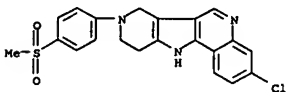


RN 150096-35-8 CAPLUS
 CN 1H-Pyrrolo[3,2-c]quinoline-3-carboxaldehyde, 7-chloro-2-[2-[[4-(methylsulfonyl)phenyl]amino]ethyl]- (9CI) (CA INDEX NAME)



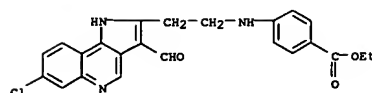
IT 150096-36-9P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
 (preparation and reaction of, in preparation of pyrroloquinoline interleukin I inhibitors)

RN 150096-36-9 CAPLUS
 CN 7H-Pyrrolo[3,2-c]quinoline-3-carboxaldehyde, 7-chloro-2-[2-[[4-(methylsulfonyl)phenyl]amino]ethyl]- (9CI) (CA INDEX NAME)

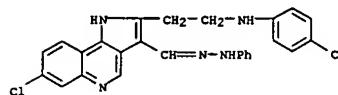


IT 117767-10-9
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (reaction of, in preparation of substituted pyrroloquinoline interleukin I inhibitors)
 RN 117767-10-9 CAPLUS
 CN 7H-Pyrrolo[3,2-c]quinoline-3-carboxaldehyde, 7-chloro-2-[2-[[4-(methylsulfonyl)phenyl]amino]ethyl]- (9CI) (CA INDEX NAME)

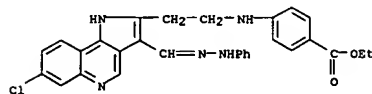
L7 ANSWER 81 OF 273 CAPLUS COPYRIGHT 2005 ACS ON STN (Continued)



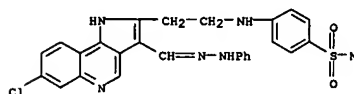
RN 150096-37-0 CAPLUS
 CN Benzonitrile, 4-[[2-(7-chloro-3-[(phenylhydrazono)methyl]-1H-pyrrolo[3,2-c]quinolin-2-yl)ethyl]amino]- (9CI) (CA INDEX NAME)



RN 150096-38-1 CAPLUS
 CN Benzoic acid, 4-[[2-(7-chloro-3-[(phenylhydrazono)methyl]-1H-pyrrolo[3,2-c]quinolin-2-yl)ethyl]amino]-, ethyl ester (9CI) (CA INDEX NAME)

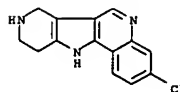


RN 150096-39-2 CAPLUS
 CN 1H-Pyrrolo[3,2-c]quinoline-3-carboxaldehyde, 7-chloro-2-[2-[[4-(methylsulfonyl)phenyl]amino]ethyl]-, phenylhydrazone (9CI) (CA INDEX NAME)

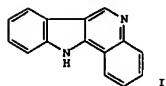


IT 150096-33-6P 150096-35-8P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation and interleukin I inhibitory activity of, reaction of)

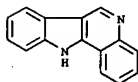
L7 ANSWER 81 OF 273 CAPLUS COPYRIGHT 2005 ACS ON STN (Continued)



L7 ANSWER 82 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 1993:517153 CAPLUS
 DN 119:117153
 TI One-pot Graebe-Ullmann synthesis of γ -carbolines under microwave irradiation
 AU Molina, Andres; Vaquero, Juan J.; Garcia-Navio, Jose L.; Alvarez-Builla, Julio
 CS Dep. Quim. Org., Univ. Alcala, Alcala de Henares, 28871, Spain
 SO Tetrahedron Letters (1993), 34(16), 2673-6
 CODEN: TELEAY; ISSN: 0040-4039
 DT Journal
 LA English
 GI

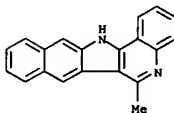


AB An efficient one-pot synthesis of γ -carboline derivs. by the Graebe-Ullmann method was conducted in a com. microwave oven in a few minutes at a low energy level. Yields are similar to those obtained by conventional heating. Thus, a mixture of 4-chloroquinoline and benzotriazole was irradiated with microwave radiation for 7 min and then H2P2O7 was added and the irradiation continued for 7 more min to give 76% the benzocarboline (I).
 IT 239-09-8P, 11H-Indolo[3,2-c]quinoline 4295-28-7P
 4295-33-4P 149429-22-1P 149429-24-3P,
 13H-Benz[5,6]indolo[3,2-c]quinoline 149429-25-4P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation of)
 RN 239-09-8 CAPLUS
 CN 11H-Indolo[3,2-c]quinoline (6CI, 7CI, 8CI, 9CI) (CA INDEX NAME)

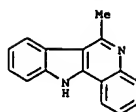


RN 4295-28-7 CAPLUS
 CN 11H-Indolo[3,2-c]quinoline, 6-methyl- (7CI, 8CI, 9CI) (CA INDEX NAME)

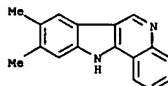
L7 ANSWER 82 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



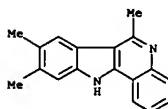
L7 ANSWER 82 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



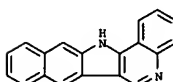
RN 4295-33-4 CAPLUS
 CN 11H-Indolo[3,2-c]quinoline, 8,9-dimethyl- (7CI, 8CI, 9CI) (CA INDEX NAME)



RN 149429-22-1 CAPLUS
 CN 11H-Indolo[3,2-c]quinoline, 6,8,9-trimethyl- (9CI) (CA INDEX NAME)

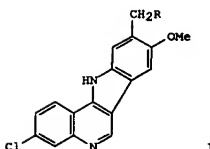


RN 149429-24-3 CAPLUS
 CN 13H-Benz[5,6]indolo[3,2-c]quinoline (9CI) (CA INDEX NAME)



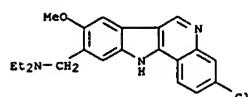
RN 149429-25-4 CAPLUS
 CN 13H-Benz[5,6]indolo[3,2-c]quinoline, 6-methyl- (9CI) (CA INDEX NAME)

L7 ANSWER 83 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 1992:612355 CAPLUS
 DN 117:212355
 TI Synthesis and in vitro antimalarial activity of some indolo[3,2-c]quinolines
 AU Go, M. L.; Koh, H. L.; Ngiam, T. L.; Phillipson, J. D.; Kirby, G. C.; O'Neill, M. J.; Warhurst, D. C.
 CS Dep. Pharm., Natl. Univ. Singapore, Singapore, Singapore
 SO European Journal of Medicinal Chemistry (1992), 27(4), 391-4
 CODEN: EJMCAS; ISSN: 0223-5234
 DT Journal
 LA English
 GI



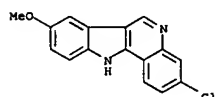
AB A series of indolo[3,2-c]quinolines I (R = pyrrolidino, piperidino, 4-methylpiperazino, H) was synthesized by Fischer indolization of 7-chloro-1,2,3,4-tetrahydroquinolin-4-one with the appropriate hydrazines H2NNHC6H3(OMe)CH2R-4,3. Evaluation of in vitro antimalarial activity was carried out against a chloroquine resistant strain of Plasmodium falciparum. Except for I (R = H) which lacked a basic side chain at position 9, the other indolo[3,2-c]quinolines were active. The most active compound was I (R = 4-methylpiperazino).3HCl which was about 104 times more active than chloroquine in vitro. The effects of structural variation on antimalarial activity were discussed.
 IT 35771-71-2
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (antimalarial activity of)
 (antimalarial activity of)
 RN 35771-71-2 CAPLUS
 CN 11H-Indolo[3,2-c]quinoline-9-methanamine, 3-chloro-N,N-diethyl-8-methoxy-, dihydrochloride (9CI) (CA INDEX NAME)

L7 ANSWER 83 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

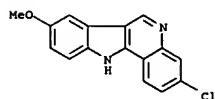


● 2 HCl

IT 116792-06-4P 116792-16-6P 144190-93-2P
 144190-94-3P 144190-95-4P 144190-96-5P
 144190-97-6P 144205-08-3P
 RL: BAC (Biological activity or effector, except adverse); BSU
 (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use);
 BIOL (Biological study); PREP (Preparation); USES (Uses)
 (preparation and antimalarial activity of)
 RN 116792-06-4 CAPLUS
 CN 11H-Indolo[3,2-c]quinoline, 3-chloro-8-methoxy- (9CI) (CA INDEX NAME)



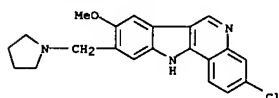
RN 116792-16-6 CAPLUS
 CN 11H-Indolo[3,2-c]quinoline, 3-chloro-8-methoxy-, monohydrochloride (9CI)
 (CA INDEX NAME)



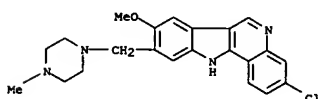
● HCl

RN 144190-93-2 CAPLUS
 CN 11H-Indolo[3,2-c]quinoline, 3-chloro-8-methoxy-9-(1-pyrrolidinylmethyl)-,
 dihydrochloride (9CI) (CA INDEX NAME)

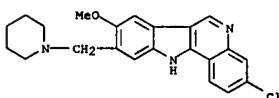
L7 ANSWER 83 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



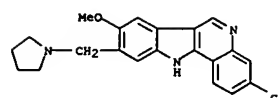
RN 144190-97-6 CAPLUS
 CN 11H-Indolo[3,2-c]quinoline, 3-chloro-8-methoxy-9-((4-methyl-1-
 piperazinyl)methyl)- (9CI) (CA INDEX NAME)



RN 144205-08-3 CAPLUS
 CN 11H-Indolo[3,2-c]quinoline, 3-chloro-8-methoxy-9-(1-piperidinylmethyl)-
 (9CI) (CA INDEX NAME)

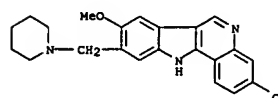


L7 ANSWER 83 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



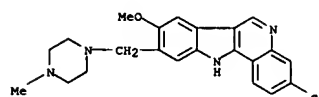
● 2 HCl

RN 144190-94-3 CAPLUS
 CN 11H-Indolo[3,2-c]quinoline, 3-chloro-8-methoxy-9-(1-piperidinylmethyl)-,
 dihydrochloride (9CI) (CA INDEX NAME)



● 2 HCl

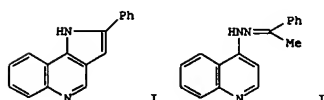
RN 144190-95-4 CAPLUS
 CN 11H-Indolo[3,2-c]quinoline, 3-chloro-8-methoxy-9-((4-methyl-1-
 piperazinyl)methyl)-, trihydrochloride (9CI) (CA INDEX NAME)



● 3 HCl

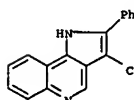
RN 144190-96-5 CAPLUS
 CN 11H-Indolo[3,2-c]quinoline, 3-chloro-8-methoxy-9-(1-pyrrolidinylmethyl)-
 (9CI) (CA INDEX NAME)

L7 ANSWER 84 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 1992:571271 CAPLUS
 DN 117:171271
 TI Synthesis of substituted 1H-pyrrolo[3,2-c]quinolines
 AU Park, Kwanghee Koh; Rapoport, Henry
 CS Dep. Chem., Univ. California, Berkeley, CA, 94720, USA
 SO Journal of Heterocyclic Chemistry (1992), 29(4), 1031-2
 CODEN: JHTCAD; ISSN: 0022-152X
 DT Journal
 LA English
 GI

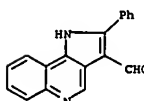


AB 1H-2-Phenylpyrrolo[3,2-c]quinoline I was prepared by thermal cyclization
 of
 quinol-4-yl hydrazone II. Subsequent substitution of the C-3 hydrogen
 atom of the pyrrole ring of I with chlorine and a formyl group is easily
 achieved by reacting I with trichloroacetyl chloride and phosphorus
 oxychloride in DMF, resp.

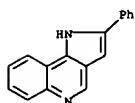
IT 143661-28-3P 143661-29-4P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation of)
 RN 143661-28-3 CAPLUS
 CN 1H-Pyrrolo[3,2-c]quinoline, 3-chloro-2-phenyl- (9CI) (CA INDEX NAME)



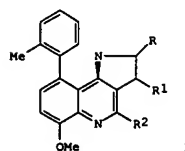
RN 143661-29-4 CAPLUS
 CN 1H-Pyrrolo[3,2-c]quinoline-3-carboxaldehyde, 2-phenyl- (9CI) (CA INDEX
 NAME)



L7 ANSWER 84 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)
 IT 124031-09-0P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
 (Reactant or reagent)
 RN 124031-09-0 CAPLUS
 CN 1H-Pyrrolo[3,2-c]quinoline, 2-phenyl- (9CI) (CA INDEX NAME)

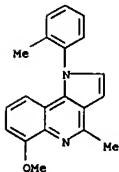


L7 ANSWER 85 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 1992:255506 CAPLUS
 DN 116:255506
 TI Reversible inhibitors of the gastric (H⁺/K⁺)-ATPase. 2.
 1-Arylpyrrolo[3,2-c]quinolines: effect of the 4-substituent
 AU Leach, Colin A.; Brown, Thomas H.; Ife, Robert J.; Keeling, David J.;
 Laing, Shiona M.; Parsons, Michael E.; Price, Carolyn A.; Wiggall,
 Kenneth
 J.
 CS SmithKline Beecham Pharm. Res. Dev., The Frythe/Welwyn/Herts, AL6 9AR, UK
 SO Journal of Medicinal Chemistry (1992), 35(10), 1845-52
 CODEN: JMCHAR; ISSN: 0022-2623
 DT Journal
 LA English
 OS CASREACT 116:255506
 GI

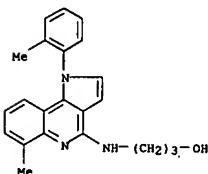


AB Further work on title compds. e.g. I (R1 = bond, R2 = Me) has identified
 the 4-position as a site where substantial modifications are tolerated,
 leading to analogs which are more potent and less toxic than those
 described previously. The best compound in the series is I (R = R1 = H,
 R2 = NHMe) (SK&F 96356) prepared starting from EtOCH2CH2CH(CO2Et)2 and
 arylamine
 in several steps, which is a potent inhibitor of gastric acid secretion
 in
 both the pentagastrin-stimulated rat and the histamine-stimulated dog.
 This compound shows reversible, K⁺-competitive binding to the enzyme.
 Because of its fluorescent properties, it is also proving useful in vitro
 as a probe of the structure and function of the (H⁺/K⁺)-ATPase.
 IT 122456-27-3
 RL: RCT (Reactant); RACT (Reactant or reagent)
 RN 122456-27-3 CAPLUS
 CN 1H-Pyrrolo[3,2-c]quinoline, 6-methoxy-4-methyl-1-(2-methylphenyl)- (9CI)
 (CA INDEX NAME)

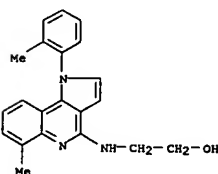
L7 ANSWER 85 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



IT 122456-41-1P 122456-42-2P 122456-43-3P
 122456-48-8P 140633-21-2P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation and ATPase and gastric antiseecretory activity of)
 RN 122456-41-1 CAPLUS
 CN 1-Propanol, 3-[[6-methyl-1-(2-methylphenyl)-1H-pyrrolo[3,2-c]quinolin-4-
 yl]amino]- (9CI) (CA INDEX NAME)

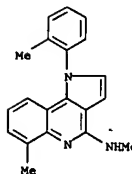


RN 122456-42-2 CAPLUS
 CN Ethanol, 2-[[6-methyl-1-(2-methylphenyl)-1H-pyrrolo[3,2-c]quinolin-4-
 yl]amino]- (9CI) (CA INDEX NAME)

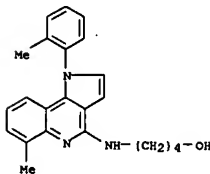


RN 122456-43-3 CAPLUS
 CN 1H-Pyrrolo[3,2-c]quinolin-4-amine, N,6-dimethyl-1-(2-methylphenyl)- (9CI)
 (CA INDEX NAME)

L7 ANSWER 85 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

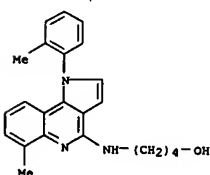


RN 122456-48-8 CAPLUS
 CN 1-Butanol, 4-[[6-methyl-1-(2-methylphenyl)-1H-pyrrolo[3,2-c]quinolin-4-
 yl]amino]-, monohydrochloride (9CI) (CA INDEX NAME)



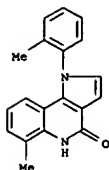
● HCl

RN 140633-21-2 CAPLUS
 CN 1-Butanol, 4-[[6-methyl-1-(2-methylphenyl)-1H-pyrrolo[3,2-c]quinolin-4-
 yl]amino]- (9CI) (CA INDEX NAME)

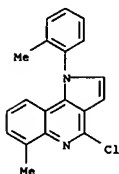


IT 122456-59-1P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT

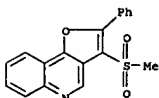
L7 ANSWER 85 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)
 (Reactant or reagent)
 (prepn. and phosphoryl chloride chlorination of)
 RN 122456-59-1 CAPLUS
 CN 4H-Pyrrolo[3,2-c]quinolin-4-one, 1,5-dihydro-6-methyl-1-(2-methylphenyl)-
 (9CI) (CA INDEX NAME)



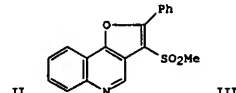
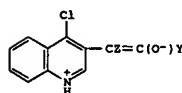
IT 122456-60-4P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation, reaction with nucleophiles, and ATPase and gastric
 antiseecretory activity of)
 RN 122456-60-4 CAPLUS
 CN 1H-Pyrrolo[3,2-c]quinoline, 4-chloro-6-methyl-1-(2-methylphenyl)- (9CI)
 (CA INDEX NAME)



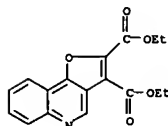
L7 ANSWER 86 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



L7 ANSWER 86 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 1992:194112 CAPLUS
 DN 116:194112
 TI N-oxides and related compounds. Part III. Reactions of quinoline
 1-oxide
 and 4-chloroquinoline 1-oxide with activated acetylenes
 AU Deeb, Ali; El-Safty, Maher; El-Kafrawey, Azza; Saad, Hosam
 CS Fac. Sci., Zagazig Univ., Zagazig, Egypt
 SO Polish Journal of Chemistry (1991), 65(5-6), 1065-9
 CODEN: PJCHDQ; ISSN: 0137-5083
 DT Journal
 LA English
 GI

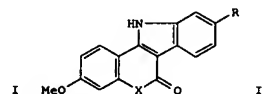
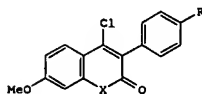


AB Treating quinoline 1-oxide with HC.tplbond.CCO2Et or
 EtO2CC.tplbond.CCO2Et
 gave 1-formyl-1-(3-quinolyl)acetate and di-Et 1-oxalyl-1-(3-
 quinolyl)acetate. Similarly, 4-chloroquinoline 1-oxide (I) treated with
 activated acetylenes, e.g. HC.tplbond.CCO2R (R = Me, Et),
 PhC.tplbond.CCO2R (R = Me, Et), gave 7-27% quinolines II (Y = H, Ph, Z =
 CO2R). Addnl. I and PhC.tplbond.CSO2Me gave 50.9% II (Y = Ph, Z = SO2Me)
 and 20% furoquinoline III.
 IT 68207-91-0P 139366-52-2P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation of)
 RN 68207-91-0 CAPLUS
 CN Furo[3,2-c]quinoline-2,3-dicarboxylic acid, diethyl ester (9CI) (CA
 INDEX NAME)

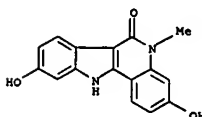


RN 139366-52-2 CAPLUS
 CN Furo[3,2-c]quinoline, 3-(methylsulfonyl)-2-phenyl- (9CI) (CA INDEX NAME)

L7 ANSWER 87 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 1992:59717 CAPLUS
 DN 116:59717
 TI Potential non-steroidal estrogens and antiestrogens. IV. Organic azides
 in heterocyclic synthesis. Part 13. Synthesis of aza- and
 diazocoumestrols via azido derivatives
 AU Stadlbauer, Wolfgang; Laschober, Rita; Kappe, Thomas
 CS Inst. Org. Chem., Karl-Franzens-Univ., Graz, A-8010, Austria
 SO Monatshefte fuer Chemie (1991), 122(10), 853-61
 CODEN: MOCHB7; ISSN: 0026-9247
 DT Journal
 LA English
 OS CASREACT 116:59717
 GI

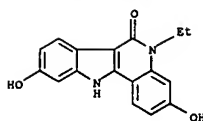


AB 4-Chloro-3-aryl-coumarin I (X = O, R = OMe) and -quinolines I (X = NMe,
 NET; R = H, OMe) undergo thermolytic ring closure by reaction with sodium
 azide in refluxing DMF to yield indolo[3,2-c]coumarin II (X = O, R = OMe)
 and indolo[3,2-c]quinolin-6(5H)-ones II (X = NMe, NET; R = H, OMe). The
 mono- and diazocoumestrol di-Me ethers II (X = O, NMe, NET; R = OMe) are
 converted into the coumestrol analogs II (R = OH) and their diacetyl
 deriva. II (R = OAc).
 IT 138617-15-9P 138617-16-0P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
 (Reactant or reagent)
 (preparation and O-acetylation of)
 RN 138617-15-9 CAPLUS
 CN 6H-Indolo[3,2-c]quinolin-6-one, 5,11-dihydro-3,9-dihydroxy-5-methyl-
 (9CI)
 (CA INDEX NAME)

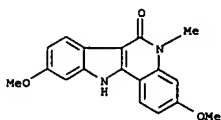


RN 138617-16-0 CAPLUS
 CN 6H-Indolo[3,2-c]quinolin-6-one, 5-ethyl-5,11-dihydro-3,9-dihydroxy- (9CI)
 (CA INDEX NAME)

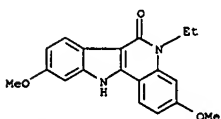
L7 ANSWER 87 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



IT 138617-10-4P 138617-11-5P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
 (Reactant or reagent)
 (preparation and O-demethylation of)
 RN 138617-10-4 CAPLUS
 CN 6H-Indolo[3,2-c]quinolin-6-one, 5-ethyl-5,11-dihydro-3,9-dimethoxy-5-methyl-
 (9CI)
 (CA INDEX NAME)

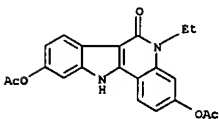


RN 138617-11-5 CAPLUS
 CN 6H-Indolo[3,2-c]quinolin-6-one, 5-ethyl-5,11-dihydro-3,9-dimethoxy- (9CI)
 (CA INDEX NAME)

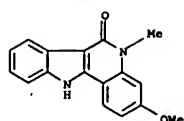


IT 138617-12-6P 138617-13-7P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation of)
 RN 138617-12-6 CAPLUS
 CN 6H-Indolo[3,2-c]quinolin-6-one, 5-ethyl-5,11-dihydro-3-methoxy-5-methyl- (9CI)
 (CA INDEX NAME)

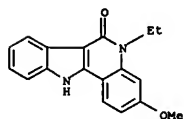
L7 ANSWER 87 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



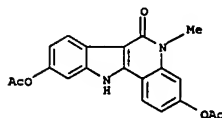
L7 ANSWER 87 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



RN 138617-13-7 CAPLUS
 CN 6H-Indolo[3,2-c]quinolin-6-one, 5-ethyl-5,11-dihydro-3-methoxy- (9CI)
 (CA INDEX NAME)

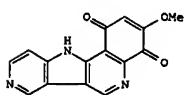


IT 138617-18-2P 138617-19-3P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation of, as potential nonsteroidal estrogen)
 RN 138617-18-2 CAPLUS
 CN 6H-Indolo[3,2-c]quinolin-6-one, 3,9-bis(acetyloxy)-5-ethyl-5,11-dihydro-5-methyl-
 (9CI) (CA INDEX NAME)



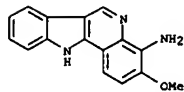
RN 138617-19-3 CAPLUS
 CN 6H-Indolo[3,2-c]quinolin-6-one, 3,9-bis(acetyloxy)-5-ethyl-5,11-dihydro-
 (9CI) (CA INDEX NAME)

L7 ANSWER 88 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 1992:50889 CAPLUS
 DN 116:50889
 TI Inhibition of eukaryotic DNA topoisomerase I and II activities by
 indoloquinolinedione derivatives
 AU Riou, Jean Francois; Helissey, Philippe; Grondard, Lucile;
 Giorgi-Renault,
 Sylviane
 CS Cent. Rech. Vitry-Alfortville, Vitry-sur-Seine, 94403, Fr.
 SO Molecular Pharmacology (1991), 40(5), 699-706
 CODEN: MOPMA3; ISSN: 0026-895X
 DT Journal
 LA English
 GI

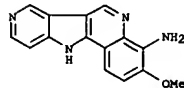


AB With the aim of obtaining new inhibitors of topoisomerases, the authors
 have evaluated various heterocyclic quinone derivs. for their ability to
 induce topoisomerase I (Topo I)- or Topo II-associated DNA breaks, using
 P388 cell nuclear extract. Several compds. belonging to the
 indolo[3,2-c]quinoline-
 1,4-dione series have been shown to possess DNA-cleavage activity.
 Further anal. using purified Topo I and II preps. has indicated that I is at
 least 10 times more potent against Topo I than against Topo II.
 Structure-activity relationships of indoloquinolinedione derivs. have
 been established and have shown that Topo I and II inhibitions are strongly
 linked, with a dose-selective preference towards Topo I. I does not
 display detectable DNA-unwinding properties. I induces a preferential
 cytotoxicity for the yeast strain JN2-134 bearing the human top1 gene
 under the control of the GAL1 promoter, indicating that Topo I inhibition
 is responsible for the yeast cytotoxicity. These data indicate that I
 and its structural analogs represent a new distinct class of eukaryotic Topo
 I and II inhibitors.
 IT 113124-67-7 126983-54-8
 RL: BIOL (Biological study)
 (DNA topoisomerase I and II inhibition by, structure in relation to)

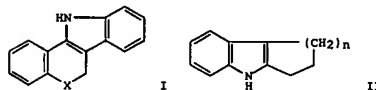
L7 ANSWER 88 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)
 RN 113124-67-7 CAPLUS
 CN 11H-Indolo[3,2-c]quinolin-4-amine, 3-methoxy- (9CI) (CA INDEX NAME)



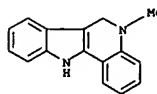
RN 126983-54-8 CAPLUS
 CN 11H-Pyrrolo[3',4':4,5]pyrrolo[3,2-c]quinolin-4-amine, 3-methoxy- (9CI)
 (CA INDEX NAME)



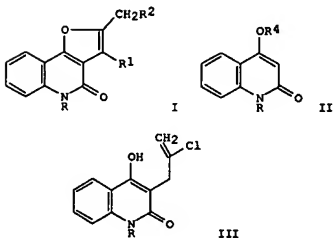
L7 ANSWER 89 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN
 RN 1991:429162 CAPLUS
 DN 115:29162
 TI Synthesis of indole derivatives with polyphosphate esters
 AU Kidwai, Mazahir; Batra, Rajni
 CS Dep. Chem., Univ. Delhi, 110 007, India
 SO Oriental Journal of Chemistry (1991), 7(1), 44-6
 CODEN: OJCHEG; ISSN: 0970-020X
 DT Journal
 LA English
 OS CASREACT 115:29162
 GI



AB Indole derivs. I (X = S, NMe) and II (n = 1, 2) were prepared in 64-75% yields by treatment of the corresponding phenylhydrazones with polyphosphate ester.
 IT 121113-05-1P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation of)
 RN 121113-05-1 CAPLUS
 CN 5H-Indolo[3,2-c]quinoline, 6,11-dihydro-5-methyl- (9CI) (CA INDEX NAME)

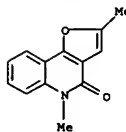


L7 ANSWER 90 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN
 RN 1991:408623 CAPLUS
 DN 115:8623
 TI A regioselective synthesis of 2-alkylfuro[3,2-c]quinolin-4(5H)-ones
 AU Majumdar, Krishna C.; Choudhury, Prabir K.
 CS Dep. Chem., Univ. Kalyani, Kalyani, 741 235, India
 SO Heterocycles (1991), 32(1), 73-8
 CODEN: HETCYM; ISSN: 0385-5414
 DT Journal
 LA English
 OS CASREACT 115:8623
 GI

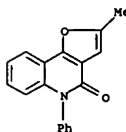


AB The title compds. I (R = Me, Ph; R1 = Me, R2 = H; R1 = H, R2 = CH2OR3, R3 = Ph, substituted Ph) were obtained in moderate yields by refluxing 1-alkyl-4-hydroxyquinolin-2(1H)-ones II (R = MePh, R4 = H) with acetylenic halides in n-butanol in the presence of anhydrous potassium carbonate.
 I (R = Me, Ph; R1 = R2 = H) were also obtained from II (R4 = CH2CCl:CH2) via [3,3] sigmatropic rearrangement and cyclization of the intermediate chloroallylic enols III with aqueous ethanolic potassium hydroxide.
 IT 121673-72-1P 121673-75-4P 134369-72-5P
 134369-73-6P 134369-74-7P 134369-75-8P
 134369-76-9P 134369-77-0P 134369-78-1P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation of)
 RN 121673-72-1 CAPLUS
 CN Furo[3,2-c]quinolin-4(5H)-one, 2,5-dimethyl- (9CI) (CA INDEX NAME)

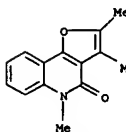
L7 ANSWER 90 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



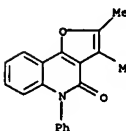
RN 121673-75-4 CAPLUS
 CN Furo[3,2-c]quinolin-4(5H)-one, 2-methyl-5-phenyl- (9CI) (CA INDEX NAME)



RN 134369-72-5 CAPLUS
 CN Furo[3,2-c]quinolin-4(5H)-one, 2,3,5-trimethyl- (9CI) (CA INDEX NAME)

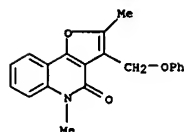


RN 134369-73-6 CAPLUS
 CN Furo[3,2-c]quinolin-4(5H)-one, 2,3-dimethyl-5-phenyl- (9CI) (CA INDEX NAME)

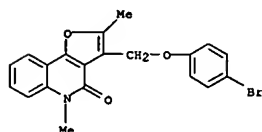


RN 134369-74-7 CAPLUS
 CN Furo[3,2-c]quinolin-4(5H)-one, 2,5-dimethyl-3-(phenoxymethyl)- (9CI) (CA INDEX NAME)

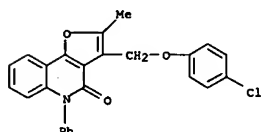
L7 ANSWER 90 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)
INDEX NAME)



RN 134369-75-8 CAPLUS
CN Furo[3,2-c]quinolin-4(5H)-one, 3-((4-bromophenoxy)methyl)-2,5-dimethyl- (9CI) (CA INDEX NAME)

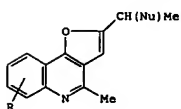


RN 134369-76-9 CAPLUS
CN Furo[3,2-c]quinolin-4(5H)-one, 3-((4-chlorophenoxy)methyl)-2-methyl-5-phenyl- (9CI) (CA INDEX NAME)



RN 134369-77-0 CAPLUS
CN Furo[3,2-c]quinolin-4(5H)-one, 2-methyl-3-(phenoxy)methyl-5-phenyl- (9CI) (CA INDEX NAME)

L7 ANSWER 91 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN
AN 1391:408612 CAPLUS
DN 115:8612
TI Reaction of 2-(1-haloalkyl)furo[3,2-c]quinolines with nucleophiles
AU Gyul'budagyan, L. V.; Aleksanyan, L. L.; Avetisyan, A. A.
CS Erevan. Gos. Univ., Yerevan, USSR
SO Armyanskii Khimicheskii Zhurnal (1990), 43(9), 587-92
CODEN: AYKZAN; ISSN: 0515-9628
DT Journal
LA Russian
OS CASREACT 115:8612
GI



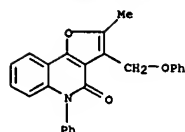
AB 2,4-Dimethyl- and 2-(1-substituted ethyl)-4-methylfuro[3,2-c]quinolines I (R = 6-, 8-Me, 6-Cl, 6-, 8-MeO, 8-Br, Nu = OH, alkoxy, NET2, NBu2) were prepared by reaction of 2-bromomethyl- and 2-(1-chloro-1-bromoethyl)-4-methyl-2,3-dihydrofuro[3,2-c]quinolines with the corresponding nucleophiles (Nu).

IT 88654-66-4P 88654-84-6P 134204-93-6P
134204-94-7P 134204-95-8P 134204-96-9P
134204-97-0P 134204-98-1P 134204-99-2P
134205-00-3P 134205-01-4P 134205-02-5P
134205-03-6P 134205-04-7P 134205-05-8P
134205-06-9P 134205-07-0P 134205-08-1P
134205-09-2P 134205-10-3P 134205-11-4P
134205-12-5P 134205-13-6P 134205-14-7P
134205-15-8P 134205-16-9P 134205-17-0P
134205-18-1P 134205-19-2P 134205-20-3P
134205-21-4P 134205-22-5P 134205-23-6P
134205-24-7P 134205-25-8P 134205-26-9P
134205-27-0P 134205-28-1P 134205-29-2P
134205-30-3P 134205-31-4P 134205-32-5P
134205-33-6P 134205-34-7P 134205-35-8P
134205-36-9P 134205-37-0P 134205-38-1P
134205-39-2P 134205-40-3P 134205-41-4P
134205-42-5P 134205-43-6P 134205-44-7P
134205-45-8P 134205-46-9P 134205-47-0P
134205-48-1P 134205-49-2P 134205-50-3P
134205-51-4P 134205-52-5P 134205-53-6P
134205-54-7P 134205-55-8P 134205-56-9P
134205-57-0P 134205-58-1P 134205-59-2P
134205-60-3P 134205-61-4P 134205-62-5P
134205-63-6P 134205-64-7P 134205-65-8P
134205-66-9P 134205-67-0P 134205-68-1P
134205-69-2P 134205-70-3P 134205-71-4P
134205-72-5P 134205-73-6P 134205-74-7P
134205-75-8P 134205-76-9P 134205-77-0P
134205-78-1P 134205-79-2P 134205-80-3P
134205-81-4P 134205-82-5P 134205-83-6P
134205-84-7P 134205-85-8P 134205-86-9P
134205-87-0P 134205-88-1P 134205-89-2P
134205-90-3P 134205-91-4P 134205-92-5P
134205-93-6P 134205-94-7P 134219-11-7P

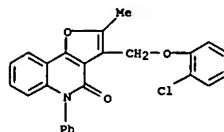
RL: SPN (Synthetic preparation); PREP (Preparation)

RN 88654-66-4 CAPLUS
CN Furo[3,2-c]quinoline, 6-chloro-2-[(1-ethoxyethyl)-4-methyl- (9CI) (CA

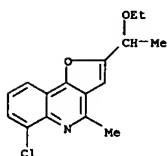
L7 ANSWER 90 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



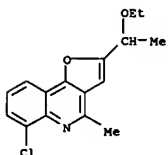
RN 134369-78-1 CAPLUS
CN Furo[3,2-c]quinolin-4(5H)-one, 3-[(2-chlorophenoxy)methyl]-2-methyl-5-phenyl- (9CI) (CA INDEX NAME)



L7 ANSWER 91 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)
INDEX NAME)

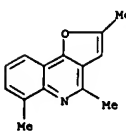


RN 88654-84-6 CAPLUS
CN Furo[3,2-c]quinoline, 6-chloro-2-[(1-ethoxyethyl)-4-methyl-, hydrochloride (9CI) (CA INDEX NAME)



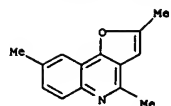
• HCl

RN 134204-93-6 CAPLUS
CN Furo[3,2-c]quinoline, 2,4,6-trimethyl- (9CI) (CA INDEX NAME)

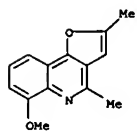


RN 134204-94-7 CAPLUS
CN Furo[3,2-c]quinoline, 2,4,8-trimethyl- (9CI) (CA INDEX NAME)

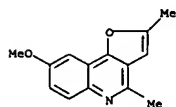
L7 ANSWER 91 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



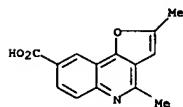
RN 134204-95-8 CAPLUS
CN Furo[3,2-c]quinoline, 6-methoxy-2,4-dimethyl- (9CI) (CA INDEX NAME)



RN 134204-96-9 CAPLUS
CN Furo[3,2-c]quinoline, 8-methoxy-2,4-dimethyl- (9CI) (CA INDEX NAME)

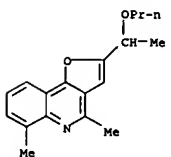


RN 134204-97-0 CAPLUS
CN Furo[3,2-c]quinoline-8-carboxylic acid, 2,4-dimethyl- (9CI) (CA INDEX NAME)

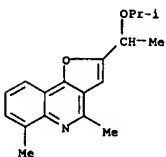


RN 134204-98-1 CAPLUS
CN Furo[3,2-c]quinoline-2-methanol, α,4,6-trimethyl- (9CI) (CA INDEX NAME)

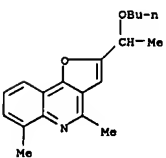
L7 ANSWER 91 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



RN 134205-02-0 CAPLUS
CN Furo[3,2-c]quinoline, 4,6-dimethyl-2-[1-(1-methylethoxy)ethyl]- (9CI) (CA INDEX NAME)

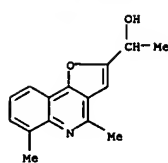


RN 134205-03-1 CAPLUS
CN Furo[3,2-c]quinoline, 2-(1-butoxyethyl)-4,6-dimethyl- (9CI) (CA INDEX NAME)

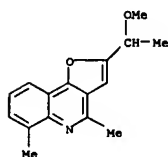


RN 134205-04-2 CAPLUS
CN Furo[3,2-c]quinoline, 4,6-dimethyl-2-[1-(2-methylpropoxy)ethyl]- (9CI) (CA INDEX NAME)

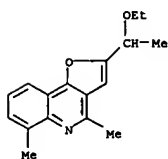
L7 ANSWER 91 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



RN 134204-99-2 CAPLUS
CN Furo[3,2-c]quinoline, 2-(1-methoxyethyl)-4,6-dimethyl- (9CI) (CA INDEX NAME)

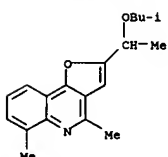


RN 134205-00-8 CAPLUS
CN Furo[3,2-c]quinoline, 2-(1-ethoxyethyl)-4,6-dimethyl- (9CI) (CA INDEX NAME)

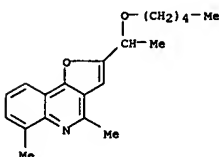


RN 134205-01-9 CAPLUS
CN Furo[3,2-c]quinoline, 4,6-dimethyl-2-(1-propoxyethyl)- (9CI) (CA INDEX NAME)

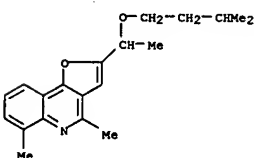
L7 ANSWER 91 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



RN 134205-05-3 CAPLUS
CN Furo[3,2-c]quinoline, 4,6-dimethyl-2-[1-(pentyloxy)ethyl]- (9CI) (CA INDEX NAME)

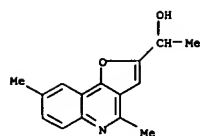


RN 134205-06-4 CAPLUS
CN Furo[3,2-c]quinoline, 4,6-dimethyl-2-[1-(3-methylbutoxy)ethyl]- (9CI) (CA INDEX NAME)

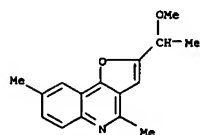


RN 134205-07-5 CAPLUS
CN Furo[3,2-c]quinoline-2-methanol, α,4,8-trimethyl- (9CI) (CA INDEX NAME)

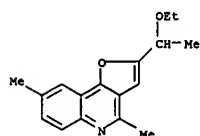
L7 ANSWER 91 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



RN 134205-08-6 CAPLUS
CN Furo[3,2-c]quinoline, 2-(1-methoxyethyl)-4,8-dimethyl- (9CI) (CA INDEX NAME)

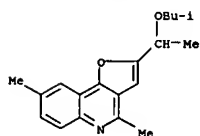


RN 134205-09-7 CAPLUS
CN Furo[3,2-c]quinoline, 2-(1-ethoxyethyl)-4,8-dimethyl- (9CI) (CA INDEX NAME)

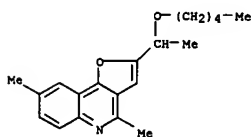


RN 134205-10-0 CAPLUS
CN Furo[3,2-c]quinoline, 4,8-dimethyl-2-(1-propoxyethyl)- (9CI) (CA INDEX NAME)

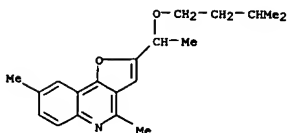
L7 ANSWER 91 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



RN 134205-14-4 CAPLUS
CN Furo[3,2-c]quinoline, 4,8-dimethyl-2-(1-(pentyloxy)ethyl)- (9CI) (CA INDEX NAME)

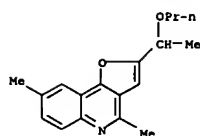


RN 134205-15-5 CAPLUS
CN Furo[3,2-c]quinoline, 4,8-dimethyl-2-(1-(3-methylbutoxy)ethyl)- (9CI) (CA INDEX NAME)

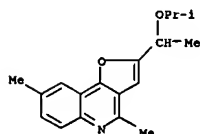


RN 134205-16-6 CAPLUS
CN Furo[3,2-c]quinoline-2-methanol, 6-chloro-4,8-dimethyl- (9CI) (CA INDEX NAME)

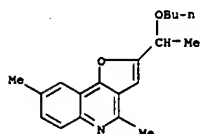
L7 ANSWER 91 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



RN 134205-11-1 CAPLUS
CN Furo[3,2-c]quinoline, 4,8-dimethyl-2-[1-(1-methylethoxy)ethyl]- (9CI) (CA INDEX NAME)

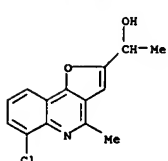


RN 134205-12-2 CAPLUS
CN Furo[3,2-c]quinoline, 2-(1-butoxyethyl)-4,8-dimethyl- (9CI) (CA INDEX NAME)

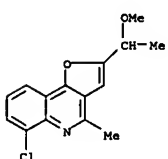


RN 134205-13-3 CAPLUS
CN Furo[3,2-c]quinoline, 4,8-dimethyl-2-[1-(2-methylpropoxy)ethyl]- (9CI) (CA INDEX NAME)

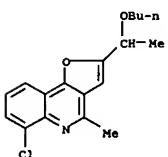
L7 ANSWER 91 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



RN 134205-17-7 CAPLUS
CN Furo[3,2-c]quinoline, 6-chloro-2-(1-methoxyethyl)-4-methyl- (9CI) (CA INDEX NAME)

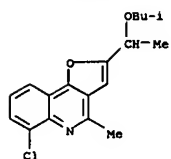


RN 134205-18-8 CAPLUS
CN Furo[3,2-c]quinoline, 2-(1-butoxyethyl)-6-chloro-4-methyl- (9CI) (CA INDEX NAME)

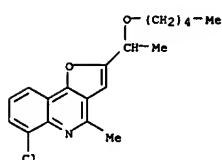


RN 134205-19-9 CAPLUS
CN Furo[3,2-c]quinoline, 6-chloro-4-methyl-2-[1-(2-methylpropoxy)ethyl]- (9CI) (CA INDEX NAME)

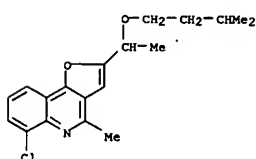
L7 ANSWER 91 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



RN 134205-20-2 CAPLUS
CN Furo[3,2-c]quinoline, 6-chloro-4-methyl-2-[1-(pentyloxy)ethyl]- (9CI)
(CA INDEX NAME)

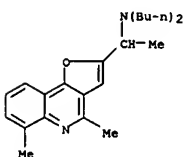


RN 134205-21-3 CAPLUS
CN Furo[3,2-c]quinoline, 6-chloro-4-methyl-2-[1-(3-methylbutoxy)ethyl]- (9CI)
(CA INDEX NAME)

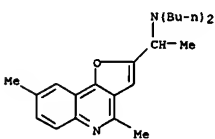


RN 134205-22-4 CAPLUS
CN Furo[3,2-c]quinoline-2-methanamine, N,N-diethyl- α ,4,6-trimethyl- (9CI) (CA INDEX NAME)

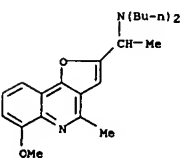
L7 ANSWER 91 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



RN 134205-26-8 CAPLUS
CN Furo[3,2-c]quinoline-2-methanamine, N,N-dibutyl- α ,4,8-trimethyl- (9CI) (CA INDEX NAME)

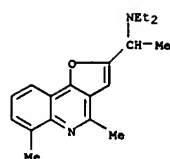


RN 134205-27-9 CAPLUS
CN Furo[3,2-c]quinoline-2-methanamine, N,N-dibutyl-6-methoxy- α ,4-dimethyl- (9CI) (CA INDEX NAME)

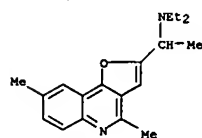


RN 134205-28-0 CAPLUS
CN Furo[3,2-c]quinoline-2-methanamine, N,N-dibutyl-8-methoxy- α ,4-dimethyl- (9CI) (CA INDEX NAME)

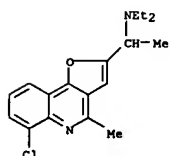
L7 ANSWER 91 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



RN 134205-23-5 CAPLUS
CN Furo[3,2-c]quinoline-2-methanamine, N,N-diethyl- α ,4,8-trimethyl- (9CI) (CA INDEX NAME)

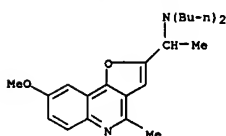


RN 134205-24-6 CAPLUS
CN Furo[3,2-c]quinoline-2-methanamine, 6-chloro-N,N-diethyl- α ,4-dimethyl- (9CI) (CA INDEX NAME)

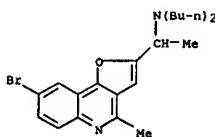


RN 134205-25-7 CAPLUS
CN Furo[3,2-c]quinoline-2-methanamine, N,N-dibutyl- α ,4,6-trimethyl- (9CI) (CA INDEX NAME)

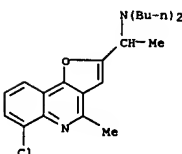
L7 ANSWER 91 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



RN 134205-29-1 CAPLUS
CN Furo[3,2-c]quinoline-2-methanamine, 8-bromo-N,N-dibutyl- α ,4-dimethyl- (9CI) (CA INDEX NAME)

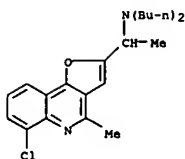


RN 134205-30-4 CAPLUS
CN Furo[3,2-c]quinoline-2-methanamine, N,N-dibutyl-6-chloro- α ,4-dimethyl- (9CI) (CA INDEX NAME)



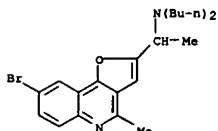
RN 134205-63-3 CAPLUS
CN Furo[3,2-c]quinoline-2-methanamine, N,N-dibutyl-6-chloro- α ,4-dimethyl-, dihydrochloride (9CI) (CA INDEX NAME)

L7 ANSWER 91 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



●2 HCl

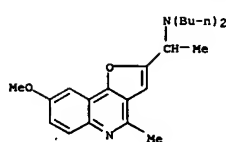
RN 134205-64-4 CAPLUS
 CN Furo[3,2-c]quinoline-2-methanamine, 8-bromo-N,N-dibutyl-α,4-dimethyl-, dihydrochloride (9CI) (CA INDEX NAME)



●2 HCl

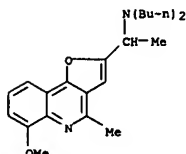
RN 134205-65-5 CAPLUS
 CN Furo[3,2-c]quinoline-2-methanamine, N,N-dibutyl-8-methoxy-α,4-dimethyl-, dihydrochloride (9CI) (CA INDEX NAME)

L7 ANSWER 91 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



●2 HCl

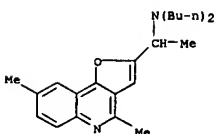
RN 134205-66-6 CAPLUS
 CN Furo[3,2-c]quinoline-2-methanamine, N,N-dibutyl-6-methoxy-α,4-dimethyl-, dihydrochloride (9CI) (CA INDEX NAME)



●2 HCl

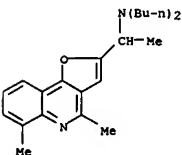
RN 134205-67-7 CAPLUS
 CN Furo[3,2-c]quinoline-2-methanamine, N,N-dibutyl-α,4,8-trimethyl-, dihydrochloride (9CI) (CA INDEX NAME)

L7 ANSWER 91 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



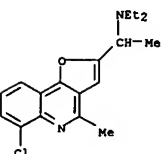
●2 HCl

RN 134205-68-8 CAPLUS
 CN Furo[3,2-c]quinoline-2-methanamine, N,N-dibutyl-α,4,6-trimethyl-, dihydrochloride (9CI) (CA INDEX NAME)



●2 HCl

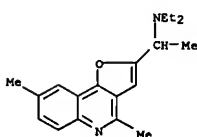
RN 134205-69-9 CAPLUS
 CN Furo[3,2-c]quinoline-2-methanamine, 6-chloro-N,N-diethyl-α,4-dimethyl-, dihydrochloride (9CI) (CA INDEX NAME)



●2 HCl

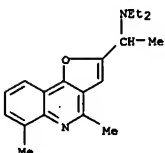
L7 ANSWER 91 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

RN 134205-70-2 CAPLUS
 CN Furo[3,2-c]quinoline-2-methanamine, N,N-diethyl-α,4,8-trimethyl-, dihydrochloride (9CI) (CA INDEX NAME)



●2 HCl

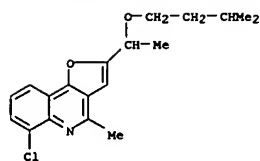
RN 134205-71-3 CAPLUS
 CN Furo[3,2-c]quinoline-2-methanamine, N,N-diethyl-α,4,6-trimethyl-, dihydrochloride (9CI) (CA INDEX NAME)



●2 HCl

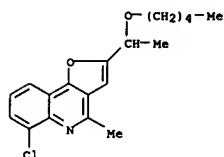
RN 134205-72-4 CAPLUS
 CN Furo[3,2-c]quinoline, 6-chloro-4-methyl-2-[1-(3-methylbutoxy)ethyl]-, hydrochloride (9CI) (CA INDEX NAME)

L7 ANSWER 91 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



● HCl

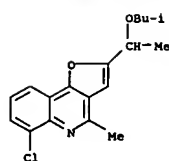
RN 134205-73-5 CAPLUS
 CN Furo[3,2-c]quinoline, 6-chloro-4-methyl-2-[(1-pentyloxy)ethyl]-, hydrochloride (9CI) (CA INDEX NAME)



● HCl

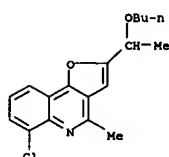
RN 134205-74-6 CAPLUS
 CN Furo[3,2-c]quinoline, 6-chloro-4-methyl-2-[(1-(2-methylpropoxy)ethyl)]-, hydrochloride (9CI) (CA INDEX NAME)

L7 ANSWER 91 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



● HCl

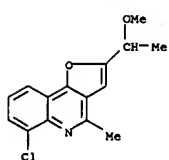
RN 134205-75-7 CAPLUS
 CN Furo[3,2-c]quinoline, 2-[(1-butoxyethyl)]-6-chloro-4-methyl-, hydrochloride (9CI) (CA INDEX NAME)



● HCl

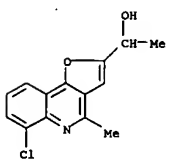
RN 134205-76-8 CAPLUS
 CN Furo[3,2-c]quinoline, 6-chloro-2-[(1-methoxyethyl)]-4-methyl-, hydrochloride (9CI) (CA INDEX NAME)

L7 ANSWER 91 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



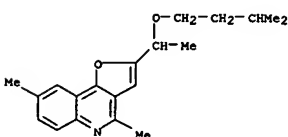
● HCl

RN 134205-77-9 CAPLUS
 CN Furo[3,2-c]quinoline-2-methanol, 6-chloro-4-methyl-, hydrochloride (9CI) (CA INDEX NAME)



● HCl

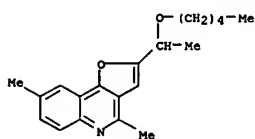
RN 134205-78-0 CAPLUS
 CN Furo[3,2-c]quinoline, 4,8-dimethyl-2-[(1-(3-methylbutoxy)ethyl)]-, hydrochloride (9CI) (CA INDEX NAME)



● HCl

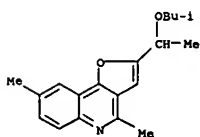
L7 ANSWER 91 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

RN 134205-79-1 CAPLUS
 CN Furo[3,2-c]quinoline, 4,8-dimethyl-2-[(1-pentyloxy)ethyl]-, hydrochloride (9CI) (CA INDEX NAME)



● HCl

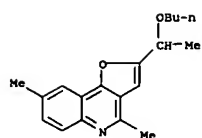
RN 134205-80-4 CAPLUS
 CN Furo[3,2-c]quinoline, 4,8-dimethyl-2-[(1-(2-methylpropoxy)ethyl)]-, hydrochloride (9CI) (CA INDEX NAME)



● HCl

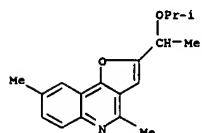
RN 134205-81-5 CAPLUS
 CN Furo[3,2-c]quinoline, 2-[(1-butoxyethyl)]-4,8-dimethyl-, hydrochloride (9CI) (CA INDEX NAME)

L7 ANSWER 91 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



● HCl

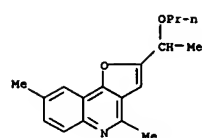
RN 134205-82-6 CAPLUS
 CN Furo[3,2-c]quinoline, 4,8-dimethyl-2-[(1-methylethoxy)ethyl]-, hydrochloride (9CI) (CA INDEX NAME)



● HCl

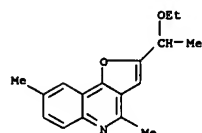
RN 134205-83-7 CAPLUS
 CN Furo[3,2-c]quinoline, 4,8-dimethyl-2-(1-propoxyethyl)-, hydrochloride (9CI) (CA INDEX NAME)

L7 ANSWER 91 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



● HCl

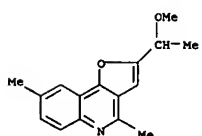
RN 134205-84-8 CAPLUS
 CN Furo[3,2-c]quinoline, 2-(1-ethoxyethyl)-4,8-dimethyl-, hydrochloride (9CI) (CA INDEX NAME)



● HCl

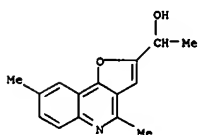
RN 134205-85-9 CAPLUS
 CN Furo[3,2-c]quinoline, 2-(1-methoxyethyl)-4,8-dimethyl-, hydrochloride (9CI) (CA INDEX NAME)

L7 ANSWER 91 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



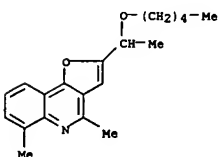
● HCl

RN 134205-86-0 CAPLUS
 CN Furo[3,2-c]quinoline-2-methanol, α,4,6-trimethyl-, hydrochloride (9CI) (CA INDEX NAME)



● HCl

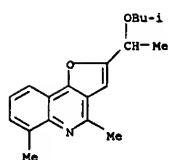
RN 134205-87-1 CAPLUS
 CN Furo[3,2-c]quinoline, 4,6-dimethyl-2-[(1-pentyloxy)ethyl]-, hydrochloride (9CI) (CA INDEX NAME)



● HCl

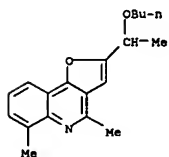
L7 ANSWER 91 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

RN 134205-88-2 CAPLUS
 CN Furo[3,2-c]quinoline, 4,6-dimethyl-2-[(2-methylpropoxy)ethyl]-, hydrochloride (9CI) (CA INDEX NAME)



● HCl

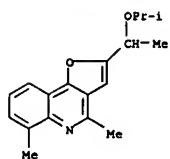
RN 134205-89-3 CAPLUS
 CN Furo[3,2-c]quinoline, 2-(1-butoxyethyl)-4,6-dimethyl-, hydrochloride (9CI) (CA INDEX NAME)



● HCl

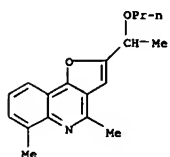
RN 134205-90-6 CAPLUS
 CN Furo[3,2-c]quinoline, 4,6-dimethyl-2-[(1-methylethoxy)ethyl]-, hydrochloride (9CI) (CA INDEX NAME)

L7 ANSWER 91 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



● HCl

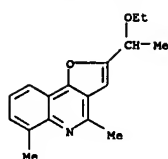
RN 134205-91-7 CAPLUS
 CN Furo[3,2-c]quinoline, 4,6-dimethyl-2-(1-propoxyethyl)-, hydrochloride (9CI) (CA INDEX NAME)



● HCl

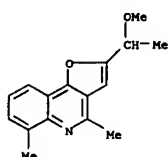
RN 134205-92-8 CAPLUS
 CN Furo[3,2-c]quinoline, 2-(1-ethoxyethyl)-4,6-dimethyl-, hydrochloride (9CI) (CA INDEX NAME)

L7 ANSWER 91 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



● HCl

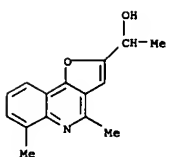
RN 134205-93-9 CAPLUS
 CN Furo[3,2-c]quinoline, 2-(1-methoxyethyl)-4,6-dimethyl-, hydrochloride (9CI) (CA INDEX NAME)



● HCl

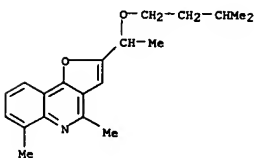
RN 134205-94-0 CAPLUS
 CN Furo[3,2-c]quinoline-2-methanol, alpha,4,6-trimethyl-, hydrochloride (9CI) (CA INDEX NAME)

L7 ANSWER 91 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



● HCl

RN 134219-11-7 CAPLUS
 CN Furo[3,2-c]quinoline, 4,6-dimethyl-2-[(3-methylbutoxy)ethyl]-, hydrochloride (9CI) (CA INDEX NAME)



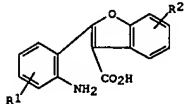
● HCl

L7 ANSWER 92 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN

AN 1991:408567 CAPLUS
 DN 115:8567
 TI 2-(2-Aminophenyl)benzo[b]furan-3-carboxylic acids as intermediates for osteoporosis inhibitors
 IN Kamiyo, Tetsukyo; Tsubaki, Atsushi; Yamaguchi, Toshiaki; Hirata, Kazumitsu; Kurashina, Kiichi
 PA Kissei Pharmaceutical Co., Ltd., Japan
 SO Jpn. Kokai Tokkyo Koho, 5 pp.
 CODEN: JTOXAF
 DT Patent
 LA Japanese
 FAN. CNT 1

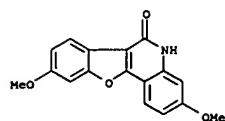
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 03024070	A2	19910201	JP 1989-160235	19890622
JP 07121934	B4	19951225		
JP 1989-160235		19890622		
CASREACT 115:8567; MARPAT 115:8567				

GI

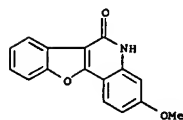


AB The title compds. I (R1, R2 = H, C1-3 alkoxy), useful as intermediates for anti-osteoporotic benzofuro[3,2-c]quinoline deriva., were prepared 2-(4-Methoxy-2-nitrophenyl)benzo[b]furan-3-carboxylic acid (100 mg), prepared by esterification of 4-methoxy-2-nitrobenzoyl chloride with 2-hydroxyphenylacetic acid Me ester then cyclization, was hydrogenated in MeOH containing Pd/C and DMF under 3.5 atm H at room temperature overnight to give 86 mg I (R1 = 4-OMe, R2 = H) (II). II (50 mg) was treated with POCl3 under stirring at 100° overnight then refluxed with AcOH and H2O to give 2 mg 3-methoxy-5H-benzofuro[3,2-c]quinolin-6-one.
 IT 92741-86-1P, 3,9-Dimethoxy-5H-benzofuro[3,2-c]quinolin-6-one 106636-00-4P, 3-Methoxy-5H-benzofuro[3,2-c]quinolin-6-one
 RL: SPN (Synthetic preparation); PREP (Preparation) (preparation of, as osteoporosis inhibitor)
 RN 92741-86-1 CAPLUS
 CN Benzofuro[3,2-c]quinolin-6(5H)-one, 3,9-dimethoxy- (9CI) (CA INDEX NAME)

L7 ANSWER 92 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



RN 106636-00-4 CAPLUS
CN Benzofuro[3,2-c]quinolin-6(5H)-one, 3-methoxy- (9CI) (CA INDEX NAME)



L7 ANSWER 93 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN

AN 1991:22885 CAPLUS

DN 114:22885

TI Preparation of spiro compounds of 5,6-dihydro-1H-indolo[3,2-c]quinoline with N heterocycles as drugs

IN Helsley, Grover Cleveland; Tegeler, John Joseph; Shoger, Kirk David

PA Hoechst-Roussel Pharmaceuticals, Inc., USA

SO Eur. Pat. Appl., 19 pp.

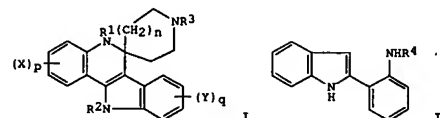
CODEN: EPXXDW

DT Patent

LA English

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI EP 407898	A1	19910116	EP 1990-112901	19900706
<-- R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE				
US 5006531	A	19910409	US 1989-377341	19890710
<-- AU 9058790	A1	19910110	AU 1990-58790	19900709
<-- CA 2020769	AA	19910111	CA 1990-2020769	19900709
<-- NO 9003066	A	19910111	NO 1990-3066	19900709
<-- JP 03048684	A2	19910301	JP 1990-179732	19900709
<-- ZA 9005363	A	19910424	ZA 1990-5363	19900709
<-- US 5045539	A	19910903	US 1991-654113	19910206
<-- PRAI US 1989-377341	A	19890710		
OS MARPAT 114:22885				
GI				

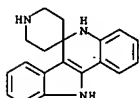


AB Spiro compds. [I; X, Y = H, alkyl, alkoxy, halo, OH, NO2, NH2, alkylthio, CF3, (di)alkylamino; R1, R2 = H, alkyl; R3 = H, alkyl, acyl, aralkyl, carbamoyl; n = 0, 1, 2; p, q = 1-3], useful as analgesic, antipsychotic, and anticonvulsant agents, are prepared. Amidation of 20 g amine II (R4 = H) with HCO2H in THF containing DCC gave 11.45 g amide II (R4 = HCO), which was reduced with LiAlH4 to give the intermediate II (R4 = Me) (III). Refluxing 7.18 g III with 4.3 mL 1-methyl-4-piperidone in EtOH containing HOAc

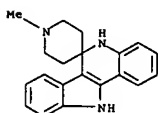
L7 ANSWER 93 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)
gave 3.01 g I (R1 = R3 = Me, R2 = X = Y = H, n = 1) isolated as fumarate hemimethanolate, which showed analgesic activity with ED50 of 10.3 mg/kg s.c. and antipsychotic activity with ED50 of 19.8 mg/kg i.p. in mice.

IT 133890-67-2P 133890-68-3P 133890-69-4P
133890-70-7P 133890-71-8P 133890-73-0P
133890-74-1P 133890-75-2P 133914-44-0P
133914-46-2P

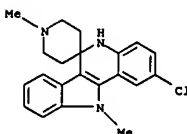
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of, as analgesics, antipsychotic and anticonvulsant agents)
RN 133890-67-2 CAPLUS
CN Spiro[6H-indolo[3,2-c]quinoline-6,4'-piperidine], 5,11-dihydro- (9CI)
(CA INDEX NAME)



RN 133890-68-3 CAPLUS
CN Spiro[6H-indolo[3,2-c]quinoline-6,4'-piperidine], 5,11-dihydro-1'-methyl- (9CI) (CA INDEX NAME)



RN 133890-69-4 CAPLUS
CN Spiro[6H-indolo[3,2-c]quinoline-6,4'-piperidine], 2-chloro-5,11-dihydro-1',11-dimethyl-, dihydrochloride (9CI) (CA INDEX NAME)

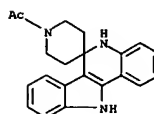


● 2 HCl

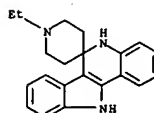
L7 ANSWER 93 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

RN 133890-70-7 CAPLUS

CN Spiro[6H-indolo[3,2-c]quinoline-6,4'-piperidine], 1'-acetyl-5,11-dihydro- (9CI) (CA INDEX NAME)



RN 133890-71-8 CAPLUS
CN Spiro[6H-indolo[3,2-c]quinoline-6,4'-piperidine], 1'-ethyl-5,11-dihydro- (9CI) (CA INDEX NAME)

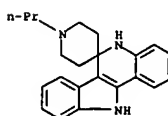


RN 133890-73-0 CAPLUS
CN Spiro[6H-indolo[3,2-c]quinoline-6,4'-piperidine], 5,11-dihydro-1'-propyl-, (2Z)-2-butenedioate (1:1) (9CI) (CA INDEX NAME)

CH 1

CRN 133890-72-9

CMF C22 H25 N3



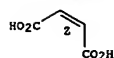
CH 2

CRN 110-16-7

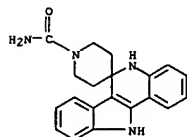
CMF C4 H4 O4

Double bond geometry as shown.

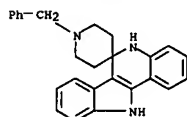
L7 ANSWER 93 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



RN 133890-74-1 CAPLUS
 CN Spiro[6H-indolo(3,2-c)quinoline-6,4'-piperidine]-1'-carboxamide,
 5,11-dihydro- (9CI) (CA INDEX NAME)



RN 133890-75-2 CAPLUS
 CN Spiro[6H-indolo(3,2-c)quinoline-6,4'-piperidine], 5,11-dihydro-1'-
 (phenylmethyl)- (9CI) (CA INDEX NAME)

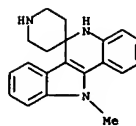


RN 133914-44-0 CAPLUS
 CN Spiro[6H-indolo(3,2-c)quinoline-6,4'-piperidine],
 5,11-dihydro-11-methyl-,
 (2E)-2-butenedioate (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 133914-43-9
 CMF C20 H21 N3

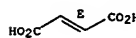
L7 ANSWER 93 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



CM 2

CRN 110-17-8
 CMF C4 H4 O4

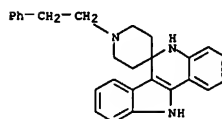
Double bond geometry as shown.



RN 133914-46-2 CAPLUS
 CN Spiro[6H-indolo(3,2-c)quinoline-6,4'-piperidine], 5,11-dihydro-1'-
 (2-phenylethyl)-, (2E)-2-butenedioate (1:1) (9CI) (CA INDEX NAME)

CM 1

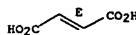
CRN 133914-45-1
 CMF C27 H27 N3



CM 2

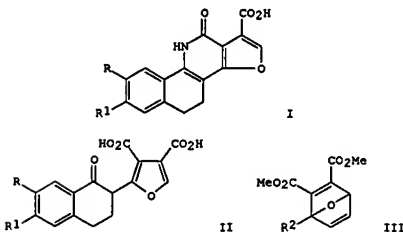
CRN 110-17-8
 CMF C4 H4 O4

Double bond geometry as shown.



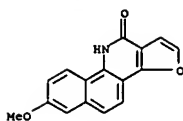
L7 ANSWER 93 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

L7 ANSWER 94 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN
 RN 1991:228787 CAPLUS
 DN 114:228787
 TI New syntheses of benzo[h]furo[3,2-c]quinolines, isosteric analogs of
 benzo[c]phenanthridines
 AU Duval, O.; Gomes, L. Mavoungou
 CS Lab. Chim. Org., UFR Med. Pharm., Angers, 49100, Fr.
 SO Journal of Heterocyclic Chemistry (1991), 28(1), 153-9
 CODEN: JHTCAD; ISSN: 0022-152X
 DT Journal
 LA French
 OS CASREACT 114:228787
 GI

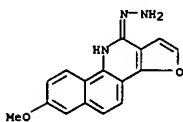


AB Benzo[h]furo[3,2-c]quinolines I (R, R1 = H, MeO) were prepared from
 furanyl
 deriva. II by cyclization with NH4OAc in AcOH. II were obtained from
 oxabicycliclones III (R2 = oxotetralinyl moiety) by sequential
 hydrogenation, pyrolysis, and saponification The I formed amides with
 Me2NH and
 N-methylpiperazine and I (R = H, R1 = MeO) underwent chlorination-
 amination at the 7-oxo ring position. The 7-hydrazinyl derivative
 underwent
 cyclization with HC(OEt)3 or NaNO2 to form triazolo and tetrazolo
 derivs.,
 resp.
 IT 133591-99-0P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
 (Reactant or reagent)
 (preparation and chlorination of, with phosphoryl chloride)
 RN 133591-99-8 CAPLUS
 CN Benzo[h]furo[3,2-c]quinolin-11(10H)-one, 7-methoxy- (9CI) (CA INDEX
 NAME)

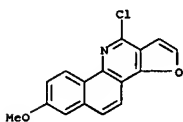
L7 ANSWER 94 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



IT 133592-02-6P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
 (preparation and cyclocondensation of, with orthoformate or sodium nitrite)
 RN 133592-02-6 CAPLUS
 CN Benzo[h]furo[3,2-c]quinolin-11(10H)-one, 7-methoxy-, hydrazone (9CI) (CA INDEX NAME)



IT 133592-00-4P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
 (preparation and hydrazinolysis of)
 RN 133592-00-4 CAPLUS
 CN Benzo[h]furo[3,2-c]quinoline, 11-chloro-7-methoxy- (9CI) (CA INDEX NAME)

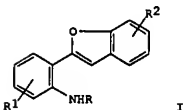


IT 133592-01-5P 133592-03-7P 133592-04-6P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation of)
 RN 133592-01-5 CAPLUS
 CN Benzo[h]furo[3,2-c]quinoline, 7-methoxy-11-(4-methyl-1-piperazinyl)- (9CI) (CA INDEX NAME)

L7 ANSWER 95 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN

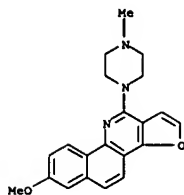
AN 1991:228716 CAPLUS
 DN 114:228716
 TI 2-(2-Aminophenyl)benzo[b]furans as intermediates for osteoporosis inhibitors
 IN Kamijo, Tetsukyo; Tsubaki, Atsushi; Yamaguchi, Toshiaki; Hirata, Kazumitsu; Kurashina, Kiichi
 PA Kissei Pharmaceutical Co., Ltd., Japan
 SO Jpn. Kokai Tokkyo Koho, 5 pp.
 CODEN: JKKKAF
 DT Patent
 LA Japanese
 FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 03024069	A2	19910201	JP 1989-160234	19890622
JP 07121931	B4	19951225		
PRAI JP 1989-160234		19890622		
OS CASREACT 114:228716; MARPAT 114:228716				
GI				

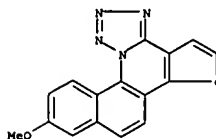


AB The title compds. I (R = H, C2-5 alkoxycarbonyl; R1, R2 = H, C1-3 alkoxy), useful as intermediates for osteoporosis inhibitors benzofuro[3,2-c]quinoline derivs., are prepared 2-(4-Methoxy-2-nitrophenyl)-6-methoxybenzo[b]furan (300 mg), prepared by etherification of 2-hydroxy-4-methoxybenzaldehyde with 4-methoxy-2-nitrobenzyl bromide then cyclization, was hydrogenated in CHCl3/MeOH containing Pd/C under 3 atm H for 15 h to give 256 mg I (R = H, R1 = 4-OMe, R2 = 6-OMe) (II). A DMF solution of 20 mg II was treated with ClCO2Et and Et3N at room temperature for 1 h then at 150° for 3 h to give 15 mg 3,9-dimethoxy-5H-benzofuro[3,2-c]quinolin-6-one.
 IT 92741-86-1P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation of, as osteoporosis inhibitor)
 RN 92741-86-1 CAPLUS
 CN Benzo[furo[3,2-c]quinolin-6(5H)-one, 3,9-dimethoxy- (9CI) (CA INDEX NAME)

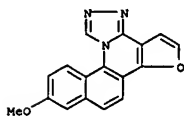
L7 ANSWER 94 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



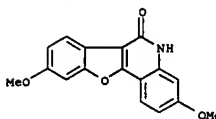
RN 133592-03-7 CAPLUS
 CN Benzo[h]furo[3,2-c]tetrazolo[1,5-a]quinoline, 10-methoxy- (9CI) (CA INDEX NAME)



RN 133592-04-8 CAPLUS
 CN Benzo[h]furo[3,2-c][1,2,4]triazolo[4,3-a]quinoline, 10-methoxy- (9CI) (CA INDEX NAME)



L7 ANSWER 95 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



L7 ANSWER 96 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN

AN 1991:207239 CAPLUS

DN 114:207239

TI Preparation of benzofuroquinolines from 4-hydroxy-3-(2-

hydroxyphenyl)quinolines

IN Kamiyo, Tetsuiko; Tsubaki, Atsushi; Yamaguchi, Toshiaki; Hirata,

Kazumitsu

PA Kissei Pharmaceutical Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 5 pp.

CODEN: JKOKAF

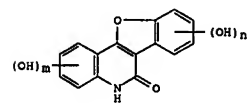
DT Patent

LA Japanese

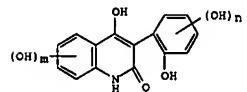
FAN. CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 02273681	A2	19901108	JP 1989-95032	19890414
JP 1989-95032		19890414		
MARPAT 114:207239				

GI



I



II

AB Benzofuroquinolines I (m, n = 0-2), which are known to be useful for treatment of osteoporosis, are prepared by melting 4-hydroxy-3-(2-hydroxyphenyl)quinolines II (m, n = same as I) with SnCl₂ and NaCl. Refluxing 8.0 g

3-(2,4-dimethoxyphenyl)-4-hydroxy-7-methoxy-1H-quinolin-2-one with 47% HBr for 3 h gave 5.5 g

3-(2,4-hydroxyphenyl)-4,7-dihydroxy-1H-quinolin-2-one, which (0.5 g) was heated with SnCl₂ and NaCl in H₂O at 200° for 3 h to afford 0.45 g 3,9-dihydroxy-5H-benzofuro[3,2-c]quinolin-6-one.

IT 92741-84-SP 113737-85-2P 119376-00-OP

119376-03-3P 129794-13-4P 129794-14-5P

129794-15-6P 129794-16-7P

RL: SPN (Synthetic preparation); PREP (Preparation)

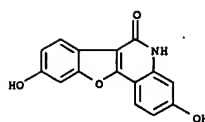
(preparation of, from hydroxy(hydroxyphenyl)quinolinone)

RN 92741-84-9 CAPLUS

CN Benzo[3,2-c]quinolin-6(5H)-one, 3,9-dihydroxy- (9CI) (CA INDEX NAME)

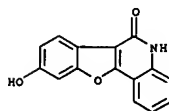
L7 ANSWER 96 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN

(Continued)



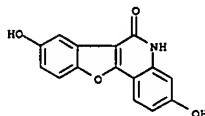
RN 113737-85-2 CAPLUS

CN Benzo[3,2-c]quinolin-6(5H)-one, 9-hydroxy- (9CI) (CA INDEX NAME)



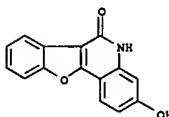
RN 119376-00-0 CAPLUS

CN Benzo[3,2-c]quinolin-6(5H)-one, 3,8-dihydroxy- (9CI) (CA INDEX NAME)



RN 119376-03-3 CAPLUS

CN Benzo[3,2-c]quinolin-6(5H)-one, 3-hydroxy- (9CI) (CA INDEX NAME)

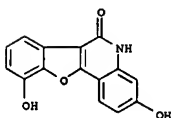


RN 129794-13-4 CAPLUS

CN Benzo[3,2-c]quinolin-6(5H)-one, 3,10-dihydroxy- (9CI) (CA INDEX NAME)

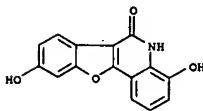
L7 ANSWER 96 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN

(Continued)



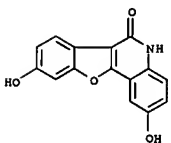
RN 129794-14-5 CAPLUS

CN Benzo[3,2-c]quinolin-6(5H)-one, 4,9-dihydroxy- (9CI) (CA INDEX NAME)



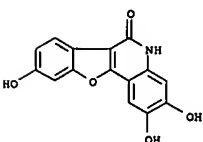
RN 129794-15-6 CAPLUS

CN Benzo[3,2-c]quinolin-6(5H)-one, 2,9-dihydroxy- (9CI) (CA INDEX NAME)



RN 129794-16-7 CAPLUS

CN Benzo[3,2-c]quinolin-6(5H)-one, 2,3,9-trihydroxy- (9CI) (CA INDEX NAME)



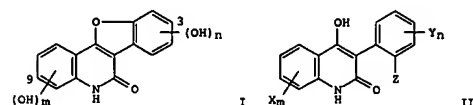
L7 ANSWER 96 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN

(Continued)

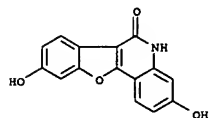
L7 ANSWER 97 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 1991:207238 CAPLUS
 DN 114:207238
 TI Preparation of benzofuroquinolines from hydroxy(alkoxyphenyl)quinolines
 IN Kamijo, Tetsuiko; Tsubaki, Atsushi; Yamaguchi, Toshiaki; Hirata, Kazumitsu
 PA Kissei Pharmaceutical Co., Ltd., Japan
 SO Jpn. Kokai Tokkyo Koho, 5 pp.
 CODEN: JKXXAF
 DT Patent
 LA Japanese
 FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 02273680	A2	19901108	JP 1989-95031	19890414

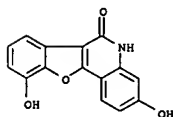
<--
 PRAI JP 1989-95031 19890414
 OS MARPAT 114:207238
 GI



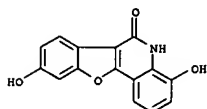
AB Benzofuroquinolines I (m, n = 0-2), which are known to be useful for treatment of osteoporosis, are prepared by heating hydroxy(alkoxyphenyl)quinolines II (X, Y, Z = Cl-3 alkoxy; m, n = same as I) in aqueous hydrohalogenic acid solns. in sealed tubes. Treatment of 100 mg 3-(2,4-dimethoxyphenyl)-4-hydroxy-7-methoxy-1H-quinolin-2-one at .apprx.200° for 3 h in 47% HBr in a sealed tube gave 82 mg I (OH at 3,9-position).
 IT 92741-84-9P 113737-85-2P 119376-00-0P
 119376-03-3P 129794-13-4P 129794-14-5P
 129794-15-6P 133587-60-7P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation of, for treatment of osteoporosis)
 RN 92741-84-9 CAPLUS
 CN Benzofuro[3,2-c]quinolin-6(5H)-one, 3,9-dihydroxy- (9CI) (CA INDEX NAME)



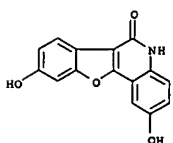
L7 ANSWER 97 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



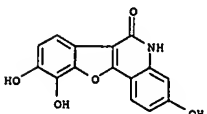
RN 129794-14-5 CAPLUS
 CN Benzofuro[3,2-c]quinolin-6(5H)-one, 4,9-dihydroxy- (9CI) (CA INDEX NAME)



RN 129794-15-6 CAPLUS
 CN Benzofuro[3,2-c]quinolin-6(5H)-one, 2,9-dihydroxy- (9CI) (CA INDEX NAME)

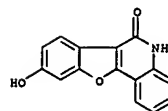


RN 133587-60-7 CAPLUS
 CN Benzofuro[3,2-c]quinolin-6(5H)-one, 3,9,10-trihydroxy- (9CI) (CA INDEX NAME)

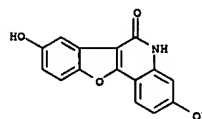


L7 ANSWER 97 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

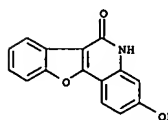
RN 113737-85-2 CAPLUS
 CN Benzofuro[3,2-c]quinolin-6(5H)-one, 9-hydroxy- (9CI) (CA INDEX NAME)



RN 119376-00-0 CAPLUS
 CN Benzofuro[3,2-c]quinolin-6(5H)-one, 3,8-dihydroxy- (9CI) (CA INDEX NAME)



RN 119376-03-3 CAPLUS
 CN Benzofuro[3,2-c]quinolin-6(5H)-one, 3-hydroxy- (9CI) (CA INDEX NAME)

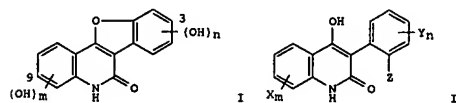


RN 129794-13-4 CAPLUS
 CN Benzofuro[3,2-c]quinolin-6(5H)-one, 3,10-dihydroxy- (9CI) (CA INDEX NAME)

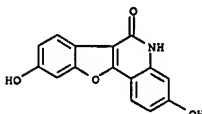
L7 ANSWER 98 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 1991:207237 CAPLUS
 DN 114:207237
 TI Preparation of benzofuroquinolines from hydroxy(alkoxyphenyl)quinolines
 IN Kamijo, Tetsuiko; Tsubaki, Atsushi; Yamaguchi, Toshiaki; Hirata, Kazumitsu
 PA Kissei Pharmaceutical Co., Ltd., Japan
 SO Jpn. Kokai Tokkyo Koho, 5 pp.
 CODEN: JKXXAF
 DT Patent
 LA Japanese
 FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 02273679	A2	19901108	JP 1989-95030	19890414

<--
 PRAI JP 1989-95030 19890414
 OS MARPAT 114:207237
 GI

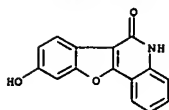


AB Benzofuroquinolines I (m, n = 0-2), which are known to be useful for treatment of osteoporosis, are prepared by heating hydroxy(alkoxyphenyl)quinolines II (X, Y, Z = Cl-3 alkoxy; m, n = same as I) in the presence of H3PO4. Treatment of 100 mg 3-(2,4-dimethoxyphenyl)-4-hydroxy-7-methoxy-1H-quinolin-2-one in 85% H3PO4 at .apprx.200° for 3 h gave 80 mg I (OH at 3,9-position).
 IT 92741-84-9P 113737-85-2P 119376-00-0P
 119376-03-3P 129794-13-4P 129794-14-5P
 129794-15-6P 133587-60-7P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation of, for treatment of osteoporosis)
 RN 92741-84-9 CAPLUS
 CN Benzofuro[3,2-c]quinolin-6(5H)-one, 3,9-dihydroxy- (9CI) (CA INDEX NAME)

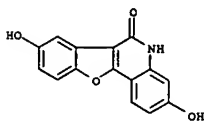


RN 113737-85-2 CAPLUS
 CN Benzofuro[3,2-c]quinolin-6(5H)-one, 9-hydroxy- (9CI) (CA INDEX NAME)

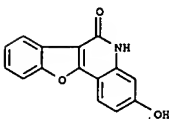
L7 ANSWER 98 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



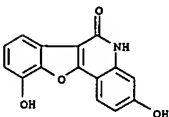
RN 119376-00-0 CAPLUS
CN Benzo[furo[3,2-c]quinolin-6(5H)-one, 3,8-dihydroxy- (9CI) (CA INDEX NAME)



RN 119376-03-3 CAPLUS
CN Benzo[furo[3,2-c]quinolin-6(5H)-one, 3-hydroxy- (9CI) (CA INDEX NAME)

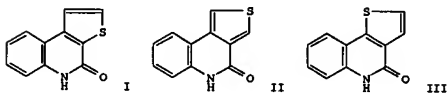


RN 129794-13-4 CAPLUS
CN Benzo[furo[3,2-c]quinolin-6(5H)-one, 3,10-dihydroxy- (9CI) (CA INDEX NAME)



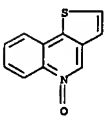
RN 129794-14-5 CAPLUS
CN Benzo[furo[3,2-c]quinolin-6(5H)-one, 4,9-dihydroxy- (9CI) (CA INDEX NAME)

L7 ANSWER 99 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN
AN 1990:631242 CAPLUS
DN 113:231242
TI Some reactions of thieno-fused quinoline N-oxides
AU Gronowitz, Salo; Timari, Geza
CS Org. Chem. 1, Chem. Cent., Univ. Lund., Lund, S-221 00, Swed.
SO Journal of Heterocyclic Chemistry (1990), 27(5), 1501-4
CODEN: JHCTAD; ISSN: 0022-152X
DT Journal
LA English
OS CASREACT 113:231242
GI



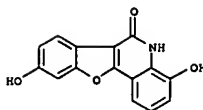
AB Three thieno-fused quinoline N-oxides were converted to the corresponding 4-oxo-4,5-dihydrothienoquinolines I, II and III. I, II, and III were alkylated with dimethylaminoethyl and dimethylaminopropyl chlorides. The reaction of the three thieno-fused quinolines with di-Me acetylenedicarboxylate was studied, as well as their reactions with BuLi and (Me2CH)2NLi.

IT 129224-61-9
RL: RCT (Reactant); RACT (Reactant or reagent)
(conversion to oxodihydrothienoquinoline derivative)
RN 129224-61-9 CAPLUS
CN Thieno[3,2-c]quinoline, 5-oxide (9CI) (CA INDEX NAME)

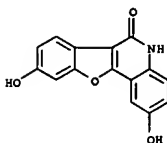


IT 130747-13-6P, Thieno[3,2-c]quinolin-4(5H)-one
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and alkylation of, with (dimethylamino)propyl chloride)
RN 130747-13-6 CAPLUS
CN Thieno[3,2-c]quinolin-4(5H)-one (9CI) (CA INDEX NAME)

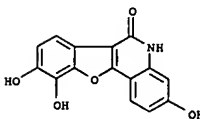
L7 ANSWER 98 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



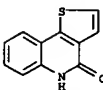
RN 129794-15-6 CAPLUS
CN Benzo[furo[3,2-c]quinolin-6(5H)-one, 2,9-dihydroxy- (9CI) (CA INDEX NAME)



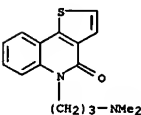
RN 133587-60-7 CAPLUS
CN Benzo[furo[3,2-c]quinolin-6(5H)-one, 3,9,10-trihydroxy- (9CI) (CA INDEX NAME)



L7 ANSWER 99 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



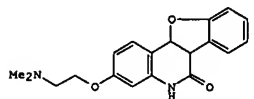
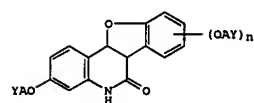
IT 130747-16-9P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)
RN 130747-16-9 CAPLUS
CN Thieno[3,2-c]quinolin-4(5H)-one, 5-[3-(dimethylamino)propyl]-, monohydrochloride (9CI) (CA INDEX NAME)



● HCl

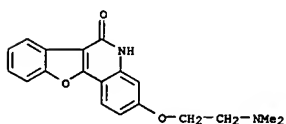
L7 ANSWER 100 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 1990:591324 CAPLUS
 DN 113:191324
 TI Preparation of benzofuro[3,2-c]quinolinones for treatment of osteoporosis
 IW Kamiyo, Tetsumi; Ujii, Arai; Tsutsumi, Naoyuki; Tsutsumi, Atsushi
 PA Kinsei Pharmaceutical Co., Ltd., Japan
 SO Eur. Pat. Appl., 12 pp.
 CODEN: EPXXDW
 DT Patent
 LA English
 FAN CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 370760	A2	19900530	EP 1989-312062	19891121
EP 370760	A3	19910724		
R: AT, BE, CH, DE, ES, FR, GB, IT, LI, NL, SE				
JP 02142793	A2	19900531	JP 1988-295715	19881122
JP 07020964	B4	19950308		
JP 02142794	A2	19900531	JP 1988-295716	19881122
JP 06092412	B4	19941116		
US 5073553	A	19911217	US 1989-440069	19891122
JP 1988-295715	A	19881122		
JP 1988-295716	A	19881122		
OS MARPAT 113:191324				
GI				

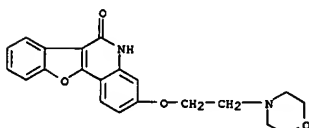


AB The title compds. [I; A = (CH2)m, CH2CH(OH)CH2; Y = (di)alkylamino, N-containing heterocyclyl; m = 0-3; n = 0, 1], were prepared A mixture of 3-hydroxy-5H-benzofuro[3,2-c]quinolin-6-one, Me2NCH2CH2Cl, and NaHCO3 was stirred 16 h at 120° in DMF to give II. II at 10-5 M inhibited bone resorption in chick embryo femur tissue; tablets were prepared containing

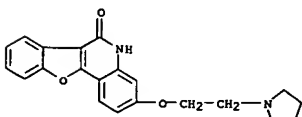
L7 ANSWER 100 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



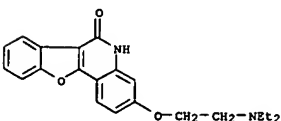
RN 130099-05-7 CAPLUS
 CN Benzofuro[3,2-c]quinolin-6(5H)-one, 3-[2-(4-morpholinyl)ethoxy]- (9CI) (CA INDEX NAME)



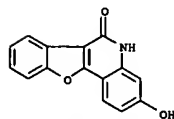
RN 130099-06-8 CAPLUS
 CN Benzofuro[3,2-c]quinolin-6(5H)-one, 3-[2-(1-pyrrolidinyl)ethoxy]- (9CI) (CA INDEX NAME)



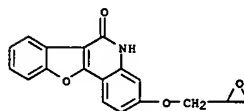
RN 130099-07-9 CAPLUS
 CN Benzofuro[3,2-c]quinolin-6(5H)-one, 3-[2-(diethylamino)ethoxy]- (9CI) (CA INDEX NAME)



L7 ANSWER 100 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)
 IT 119376-03-3
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (alkylation of, in preparation of drugs for treating osteoporosis)
 RN 119376-03-3 CAPLUS
 CN Benzofuro[3,2-c]quinolin-6(5H)-one, 3-hydroxy- (9CI) (CA INDEX NAME)



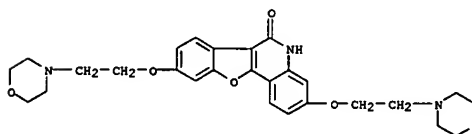
IT 129854-68-8P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation and ring-opening condensation of, with morpholine)
 RN 129854-68-8 CAPLUS
 CN Benzofuro[3,2-c]quinolin-6(5H)-one, 3-(oxiranylmethoxy)- (9CI) (CA INDEX NAME)



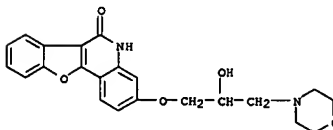
IT 130099-04-6P 130099-05-7P 130099-06-8P
 130099-07-9P 130099-08-0P 130099-09-1P
 130099-10-4P 130099-11-5P 130099-12-6P
 130099-13-7P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation of, for treatment of osteoporosis)
 RN 130099-04-6 CAPLUS
 CN Benzofuro[3,2-c]quinolin-6(5H)-one, 3-[2-(dimethylamino)ethoxy]- (9CI) (CA INDEX NAME)

L7 ANSWER 100 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

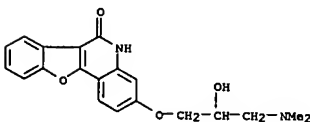
RN 130099-08-0 CAPLUS
 CN Benzofuro[3,2-c]quinolin-6(5H)-one, 3,9-bis[2-(4-morpholinyl)ethoxy]- (9CI) (CA INDEX NAME)



RN 130099-09-1 CAPLUS
 CN Benzofuro[3,2-c]quinolin-6(5H)-one, 3-[2-hydroxy-3-(4-morpholinyl)propoxy]- (9CI) (CA INDEX NAME)

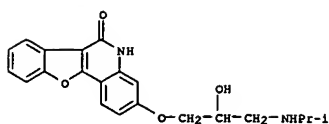


RN 130099-10-4 CAPLUS
 CN Benzofuro[3,2-c]quinolin-6(5H)-one, 3-[3-(dimethylamino)-2-hydroxypropoxy]- (9CI) (CA INDEX NAME)



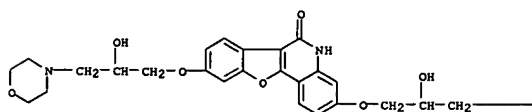
RN 130099-11-5 CAPLUS
 CN Benzofuro[3,2-c]quinolin-6(5H)-one, 3-[2-hydroxy-3-[(1-methylethyl)amino]propoxy]- (9CI) (CA INDEX NAME)

L7 ANSWER 100 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



RN 130099-12-6 CAPLUS
 CN Benzo[3,2-c]quinolin-6(5H)-one, 3,9-bis[2-hydroxy-3-(4-morpholinyl)propoxy]- (9CI) (CA INDEX NAME)

PAGE 1-A

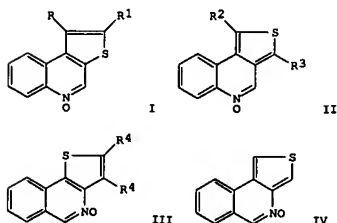


PAGE 1-B



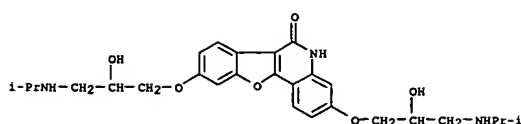
RN 130099-13-7 CAPLUS
 CN Benzo[3,2-c]quinolin-6(5H)-one, 3,9-bis[2-hydroxy-3-[(1-methylethyl)amino]propoxy]- (9CI) (CA INDEX NAME)

L7 ANSWER 101 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 1990:591206 CAPLUS
 DN 113:191206
 TI On the bromination of the six thieno analogs of phenanthridine N-oxide
 AU Gronowitz, Salo; Timari, Geza
 CS Chem. Cent., Univ. Lund, Lund, S-221 00, Swed.
 SO Chemica Scripta (1989), 29(4), 309-11
 CODEN: CSRPB9; ISSN: 0004-2056
 DT Journal
 LA English
 OS CASREACT 113:191206
 GI

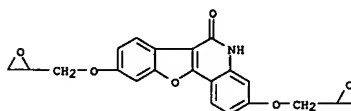


AB The bromination of 6 thienoisquinoline and thienoisquinoline oxides was studied. Thus, treatment of thieno[2,3-c]quinoline oxide I (R = R1 = H) with Br2 in H2SO4-Ag2SO4 gave 66% I (R = Br, R1 = H) and 16% I (R = R1 = Br). Bromination of thieno[3,4-c]quinoline oxide II (R2 = R3 = H) in a buffered system (Na2CO3, MgSO4, K2HPO4) in CHCl3 gave 43% II (R2 = H, R3 = Br) or 52% II (R2 = R3 = Br) depending on the amt of Br2 used. Up to 60% dibromothienoisquinoline III (R4 = Br) was obtained on treating III (R4 = H) with Br2-H2SO4-Ag2SO4. Attempted bromination of thieno[3,4-c]isquinoline IV under both conditions gave only decomposition products.
 IT 129224-61-9
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (bromination of)
 RN 129224-61-9 CAPLUS
 CN Thieno[3,2-c]quinoline, 5-oxide (9CI) (CA INDEX NAME)

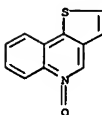
L7 ANSWER 100 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



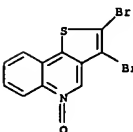
IT 129854-67-7
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (ring-opening condensation of, with amines)
 RN 129854-67-7 CAPLUS
 CN Benzo[3,2-c]quinolin-6(5H)-one, 3,9-bis[oxiranylmethoxy]- (9CI) (CA INDEX NAME)



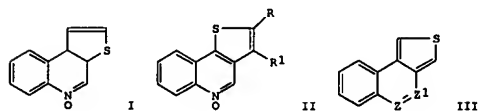
L7 ANSWER 101 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



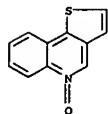
IT 130081-49-1P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation of)
 RN 130081-49-1 CAPLUS
 CN Thieno[3,2-c]quinoline, 2,3-dibromo-, 5-oxide (9CI) (CA INDEX NAME)



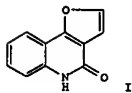
L7 ANSWER 102 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 1990:591205 CAPLUS
 DN 113:191205
 TI On the nitration of the six isomeric thieno-fused analogs of phenanthridine N-oxide
 AU Gronowitz, S.; Timari, G.
 CS Chem. Cent., Univ. Lund, Lund, S-221 00, Swed.
 SO Chemica Scripta (1989), 29(4), 305-8
 CODEN: CSRPB9; ISSN: 0004-2056
 DT Journal
 LA English
 OS CASREACT 113:191205
 GI



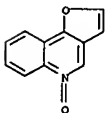
AB Nitration of thieno[2,3-c]quinoline oxide I with fuming nitric acid in concentrated sulfuric acid occurs in the 1-(β)-position while thieno[3,2-c]quinoline oxides, e.g., II (R = R1 = H), gave a mixture of the 2- and 3-nitro derivs., e.g. II (R = NO₂, R1 = H; R = H, R1 = NO₂). On the other hand, [b]-fused thienoisquinoline oxides gave only the α -nitro isomers. Nitration of the more reactive [c]-fused systems had to be carried out with 70% nitric acid in concentrated sulfuric acid at 0° and gave the 1-nitro isomers with both thieno[3,4-c]quinoline and -isoquinoline oxides II (Z = NO, Z1 = CH; Z = CH, Z1 = NO). Structures were determined from 1H and proton coupled 13C-NMR spectra. Nitration most probably occurs on the protonated form.
 IT 129224-61-9
 RL: RCT (Reactant); RACT (Reactant or reagent) (nitration of)
 RN 129224-61-9 CAPLUS
 CN Thieno[3,2-c]quinoline, 5-oxide (9CI) (CA INDEX NAME)



L7 ANSWER 103 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 1990:591200 CAPLUS
 DN 113:191200
 TI A new method for the synthesis of 4-oxo-4,5-dihydrofuro[3,2-c]quinoline
 AU Gronowitz, Salo; Timari, Geza
 CS Org. Chem. 1, Chem. Cent., Univ. Lund, Lund, S-221 00, Swed.
 SO Journal of Heterocyclic Chemistry (1990), 27(4), 1159-60
 CODEN: JHTCAD; ISSN: 0022-152X
 DT Journal
 LA English
 OS CASREACT 113:191200
 GI

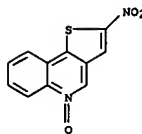


AB A new method for the synthesis of the title compound (I) is the Pd(0)-catalyzed coupling of o-bromonitrobenzene with 3-formyl-2-tributylstannylfuran, followed by reductive ring closure to furo[3,2-c]quinoline N-oxide and rearrangement.
 IT 130056-70-1P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent) (preparation and rearrangement of, to oxodihydrofuroquinoline)
 RN 130056-70-1 CAPLUS
 CN Furo[3,2-c]quinoline, 5-oxide (9CI) (CA INDEX NAME)

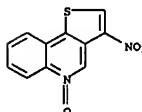


IT 35136-12-0P, Furo[3,2-c]quinolin-4(5H)-one
 RL: SPN (Synthetic preparation); PREP (Preparation) (preparation of)
 RN 35136-12-0 CAPLUS
 CN Furo[3,2-c]quinolin-4(5H)-one (6CI, 9CI) (CA INDEX NAME)

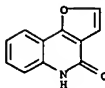
L7 ANSWER 102 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)
 IT 130081-54-8P 130081-55-9P
 RL: SPN (Synthetic preparation); PREP (Preparation) (preparation of)
 RN 130081-54-8 CAPLUS
 CN Thieno[3,2-c]quinoline, 2-nitro-, 5-oxide (9CI) (CA INDEX NAME)



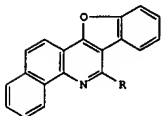
RN 130081-55-9 CAPLUS
 CN Thieno[3,2-c]quinoline, 3-nitro-, 5-oxide (9CI) (CA INDEX NAME)



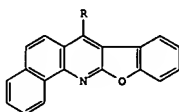
L7 ANSWER 103 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



L7 ANSWER 104 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 1990:591199 CAPLUS
 DN 113:191199
 TI The synthesis of benzofuroquinolines. VII. Some
 benzo[h]benzofuro[2,3-b]-
 and -(3,2-c)quinoline derivatives
 AU Yamaguchi, Seiji; Yoshimoto, Yoshiteru; Murai, Rikuko; Ohama, Eiko;
 Kawase, Yoshiyuki
 CS Fac. Sci., Toyama Univ., Toyama, 930, Japan
 SO Journal of Heterocyclic Chemistry (1990), 27(4), 999-1001
 CODEN: JHTCAD; ISSN: 0022-152X
 DT Journal
 LA English
 OS CASREACT 113:191199
 GI

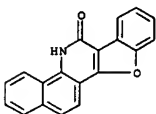


I



II

AB Benzo[h]benzofuro[3,2-c]quinolines I (R = H, Me), were synthesized by the demethylation-cyclization of 3-(o-methoxyphenyl)-4(1H)-benzo[h]quinolinone and its 2-Me derivative Benzo[h]benzofuro[2,3-b]- and [3,2-c]quinolinones were obtained by the demethylation-cyclization of 4-hydroxy-3-(o-methoxyphenyl)-2(1H)-benzo[h]quinolinone, and they were converted to the chloro derivs. I and II (R = Cl) and carbonitrile II (R = cyano).
 IT 130223-76-69
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent) (preparation and chlorination of)
 RN 130223-76-6 CAPLUS
 CN Benzo[h]benzofuro[3,2-c]quinolin-6(5H)-one (9CI) (CA INDEX NAME)

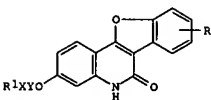


IT 130223-78-89

L7 ANSWER 105 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 1990:572001 CAPLUS
 DN 113:172001
 TI Preparation of benzofuro[3,2-c]quinolinones for treatment of osteoporosis
 IN Kamijo, Tetsukyo; Ujile, Shinsei; Tsutsumi, Naoyuki; Tsubaki, Atsushi
 PA Kissei Pharmaceutical Co., Ltd., Japan
 SO Jpn. Kokai Tokkyo Koho, 7 pp.
 CODEN: JJKXAF
 DT Patent
 LA Japanese
 FAN. CNT 1

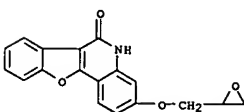
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 02142792	A2	19900531	JP 1988-295714	19881122
JP 06092411	B4	19941116		
JP 1988-295714		19881122		
MARPAT 113:172001				

 PI JP 02142792
 <-- JP 06092411
 FRAI JP 1988-295714
 OS MARPAT 113:172001
 GI

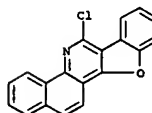


I

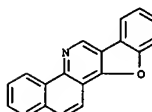
AB The title compds. [I; R = H, OYXR1; R1 = lower alkyl, lower aralkyl; X = O, S; Y = lower alkylene, CH2CH(OH)CH2] were prepared A solution of 30 mg 3-hydroxy-5H-benzofuro[3,2-c]quinolin-6-one in DMSO was treated with NaOH and MeOCH2Cl for 16 h to give 13 mg I (R = H, YXR1 = CH2OMe) (II). Femur of unhatched chicken was cultivated in BGJb-HW2 media containing 10-5 mol II at 37° for 6 days, the obtained femur was put in 1N HCl solution, and Ca content was measured; osteogenesis activity (rate of Ca content to control) of II was 1.03 and bone-elongating activity was 1.05. II also inhibited bone resorption.
 IT 129854-68-89
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent) (preparation and ring opening of, with isopropanol or Et mercaptan)
 RN 129854-68-8 CAPLUS
 CN Benzofuro[3,2-c]quinolin-6(5H)-one, 3-(oxiranylmethoxy)- (9CI) (CA INDEX NAME)



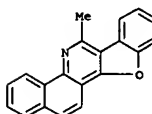
L7 ANSWER 104 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent) (prepn. and reaction of, with cyanide)
 RN 130223-78-8 CAPLUS
 CN Benzo[h]benzofuro[3,2-c]quinoline, 6-chloro- (9CI) (CA INDEX NAME)



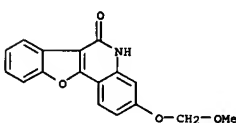
IT 130223-72-2P, Benzo[h]benzofuro[3,2-c]quinoline
 130223-73-3P
 RL: SPN (Synthetic preparation); PREP (Preparation) (preparation of)
 RN 130223-72-2 CAPLUS
 CN Benzo[h]benzofuro[3,2-c]quinoline (9CI) (CA INDEX NAME)



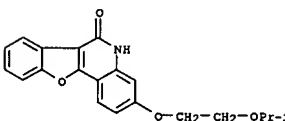
RN 130223-73-3 CAPLUS
 CN Benzo[h]benzofuro[3,2-c]quinoline, 6-methyl- (9CI) (CA INDEX NAME)



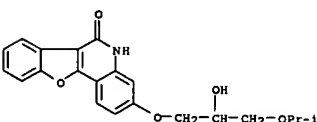
L7 ANSWER 105 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)
 IT 129854-69-9P 129854-70-2P 129854-71-3P 129854-72-4P 129854-73-5P 129854-74-6P 129854-75-7P
 RL: SPN (Synthetic preparation); PREP (Preparation) (preparation of, as osteoporosis inhibitor)
 RN 129854-69-9 CAPLUS
 CN Benzofuro[3,2-c]quinolin-6(5H)-one, 3-(methoxymethoxy)- (9CI) (CA INDEX NAME)



RN 129854-70-2 CAPLUS
 CN Benzofuro[3,2-c]quinolin-6(5H)-one, 3-[2-(1-methylethoxy)ethoxy]- (9CI) (CA INDEX NAME)

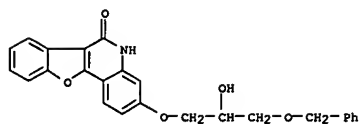


RN 129854-71-3 CAPLUS
 CN Benzofuro[3,2-c]quinolin-6(5H)-one, 3-[2-hydroxy-3-(1-methylethoxy)propoxy]- (9CI) (CA INDEX NAME)

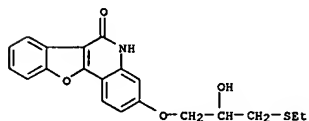


RN 129854-72-4 CAPLUS
 CN Benzofuro[3,2-c]quinolin-6(5H)-one, 3-[2-hydroxy-3-(phenylmethoxy)propoxy]- (9CI) (CA INDEX NAME)

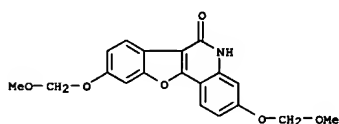
L7 ANSWER 105 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



RN 129854-73-5 CAPLUS
CN Benzo[3,2-c]quinolin-6(5H)-one, 3-[3-(ethylthio)-2-hydroxypropoxy]- (9CI) (CA INDEX NAME)

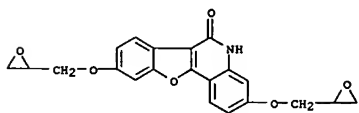


RN 129854-74-6 CAPLUS
CN Benzo[3,2-c]quinolin-6(5H)-one, 3,9-bis(methoxymethoxy)- (9CI) (CA INDEX NAME)

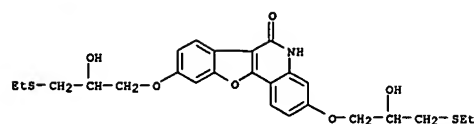


RN 129854-75-7 CAPLUS
CN Benzo[3,2-c]quinolin-6(5H)-one, 3,9-bis[3-(ethylthio)-2-hydroxypropoxy]- (9CI) (CA INDEX NAME)

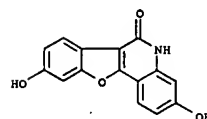
L7 ANSWER 105 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



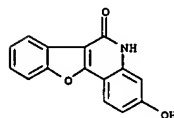
L7 ANSWER 105 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



IT 92741-84-9 119376-03-3 129854-67-7
RL: RCT (Reactant); RACT (Reactant or reagent)
(reaction of, in preparation of osteoporosis inhibitor)
RN 92741-84-9 CAPLUS
CN Benzo[3,2-c]quinolin-6(5H)-one, 3,9-dihydroxy- (9CI) (CA INDEX NAME)



RN 119376-03-3 CAPLUS
CN Benzo[3,2-c]quinolin-6(5H)-one, 3-hydroxy- (9CI) (CA INDEX NAME)



RN 129854-67-7 CAPLUS
CN Benzo[3,2-c]quinolin-6(5H)-one, 3,9-bis(oxiranylmethoxy)- (9CI) (CA INDEX NAME)

L7 ANSWER 106 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN

AN 1990:571998 CAPLUS
DN 113:171998
TI Preparation of hydroxybenzofuro[3,2-c]quinolin-6-one esters as bone growth stimulants

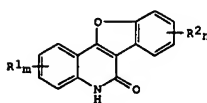
IN Kamiyo, Tetsuhide; Ujii, Arao; Harada, Hiromu; Tsutsumi, Naoyuki; Tsubaki, Atsushi; Yamaguchi, Toshiaki; Nagata, Hideo
PA Kissei Pharmaceutical Co., Ltd., Japan
SO Eur. Pat. Appl., 18 pp.
CODEN: EPXKDW

DT Patent

LA English

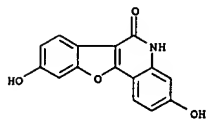
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 357172	A2	19900307	EP 1989-302306	19890308
EP 357172	A3	19910327		
JP 02062878	A2	19900302	JP 1988-215755	19880830
JP 06092410	B4	19941116		
DK 8900919	A	19900301	DK 1989-919	19890227
AU 8930977	A1	19900308	AU 1989-30977	19890302
AU 624361	B2	19920611		
FI 8901120	A	19900301	FI 1989-1120	19890309
NO 8901027	A	19900301	NO 1989-1027	19890309
NO 168358	B	19911104		
NO 168358	C	19920212		
US 5023261	A	19910611	US 1989-321248	19890309
PRAI JP 1988-215755	A	19880830		
OS MARPAT 113:171998				
GI				

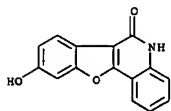


AB The title compds. [I: R1 = R2 = OR3; R3 = (N-alkyl- or N,N-dialkyl)carbamoyl, alkylsulfonyl, CHO, (un)substituted aliphatic acyl; m = 1,2; n = 0, 1; n = m = 0; or R1, R2 = OH, N,N-dialkylcarbamoyloxy; m = 1,2; n = 1], bone resorption inhibitors with bone growth stimulating activity, useful for the prevention and treatment of osteoporosis, were prepared, e.g., by acylation of hydroxybenzofuroquinolones. Thus, a solution of 21 g 3,9-dihydroxy-5H-benzofuro[3,2-c]quinolin-6-one in 450 mL DMF was treated successively with 55 mL Et3N, 41 g Me2NCOCl, and 500 mg

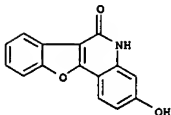
L7 ANSWER 106 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)
 dimethylaminopyridine, and the mixt. was stirred overnight at room temp.
 to give 30 g I [R1 = 3-(Me2NCO), R2 = 9-(Me2NCO), m = n = 1] (II). The
 latter in vitro had a stimulatory potency on ossification of the chick
 embryo thighbone of 1.22 and a potency of growth of femoral length of
 1.10. Tablets contg. II were formulated.
 IT 92741-84-9P 113737-85-2P 119376-03-3P
 129794-13-4P 129794-14-5P 129794-15-6P
 129794-16-7P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
 (Reactant or reagent)
 RN 92741-84-9 CAPLUS
 CN Benzo[3,2-c]quinolin-6(5H)-one, 3,9-dihydroxy- (9CI) (CA INDEX NAME)



RN 113737-85-2 CAPLUS
 CN Benzo[3,2-c]quinolin-6(5H)-one, 9-hydroxy- (9CI) (CA INDEX NAME)

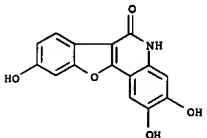


RN 119376-03-3 CAPLUS
 CN Benzo[3,2-c]quinolin-6(5H)-one, 3-hydroxy- (9CI) (CA INDEX NAME)

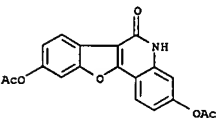


RN 129794-13-4 CAPLUS
 CN Benzo[3,2-c]quinolin-6(5H)-one, 3,10-dihydroxy- (9CI) (CA INDEX NAME)

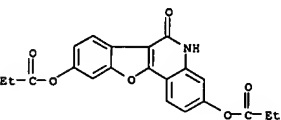
L7 ANSWER 106 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



IT 129794-17-8P 129794-18-9P 129794-19-0P
 129794-20-3P 129794-21-4P 129794-22-5P
 129794-23-6P 129794-24-7P 129794-25-8P
 129794-26-9P 129794-27-0P 129794-28-1P
 129794-29-2P 129794-30-5P 129794-31-6P
 129794-32-7P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation of, as bone growth stimulant)
 RN 129794-17-8 CAPLUS
 CN Benzo[3,2-c]quinolin-6(5H)-one, 3,9-bis(acetyloxy)- (9CI) (CA INDEX NAME)

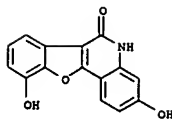


RN 129794-18-9 CAPLUS
 CN Benzo[3,2-c]quinolin-6(5H)-one, 3,9-bis(1-oxopropoxy)- (9CI) (CA INDEX NAME)

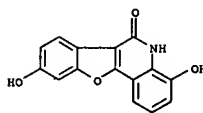


RN 129794-19-0 CAPLUS
 CN Butanedioic acid, 5,6-dihydro-6-oxobenzo[3,2-c]quinoline-3,9-diyl diethyl ester (9CI) (CA INDEX NAME)

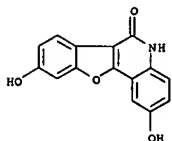
L7 ANSWER 106 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



RN 129794-14-5 CAPLUS
 CN Benzo[3,2-c]quinolin-6(5H)-one, 4,9-dihydroxy- (9CI) (CA INDEX NAME)

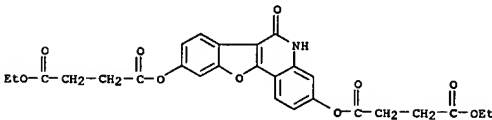


RN 129794-15-6 CAPLUS
 CN Benzo[3,2-c]quinolin-6(5H)-one, 2,9-dihydroxy- (9CI) (CA INDEX NAME)

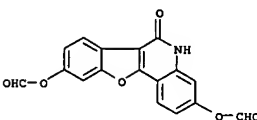


RN 129794-16-7 CAPLUS
 CN Benzo[3,2-c]quinolin-6(5H)-one, 2,3,9-trihydroxy- (9CI) (CA INDEX NAME)

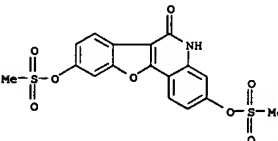
L7 ANSWER 106 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



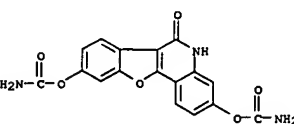
RN 129794-20-3 CAPLUS
 CN Benzo[3,2-c]quinolin-6(5H)-one, 3,9-bis(formyloxy)- (9CI) (CA INDEX NAME)



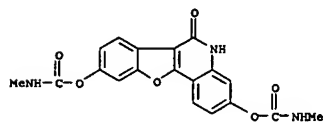
RN 129794-21-4 CAPLUS
 CN Benzo[3,2-c]quinolin-6(5H)-one, 3,9-bis(methylsulfonyloxy)- (9CI) (CA INDEX NAME)



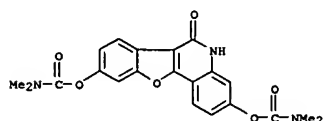
RN 129794-22-5 CAPLUS
 CN Benzo[3,2-c]quinolin-6(5H)-one, 3,9-bis(aminocarbonyloxy)- (9CI) (CA INDEX NAME)



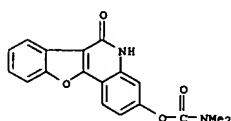
L7 ANSWER 106 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)
 RN 129794-23-6 CAPLUS
 CN Benzofuro[3,2-c]quinolin-6(5H)-one, 3,9-bis[[methylamino]carbonyloxy]-
 (9CI) (CA INDEX NAME)



RN 129794-24-7 CAPLUS
 CN Carbamic acid, dimethyl-, 5,6-dihydro-6-oxobenzofuro[3,2-c]quinoline-3,9-diyl ester (9CI) (CA INDEX NAME)

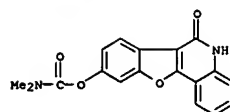


RN 129794-25-8 CAPLUS
 CN Carbamic acid, dimethyl-, 5,6-dihydro-6-oxobenzofuro[3,2-c]quinolin-3-yl ester (9CI) (CA INDEX NAME)

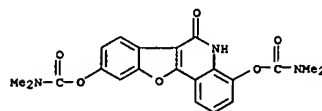


RN 129794-26-9 CAPLUS
 CN Carbamic acid, dimethyl-, 5,6-dihydro-6-oxobenzofuro[3,2-c]quinolin-9-yl ester (9CI) (CA INDEX NAME)

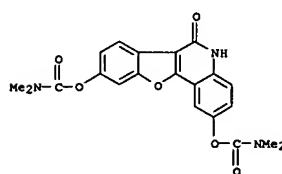
L7 ANSWER 106 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



RN 129794-27-0 CAPLUS
 CN Carbamic acid, dimethyl-, 5,6-dihydro-6-oxobenzofuro[3,2-c]quinoline-4,9-diyl ester (9CI) (CA INDEX NAME)

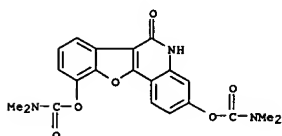


RN 129794-28-1 CAPLUS
 CN Carbamic acid, dimethyl-, 5,6-dihydro-6-oxobenzofuro[3,2-c]quinoline-2,9-diyl ester (9CI) (CA INDEX NAME)

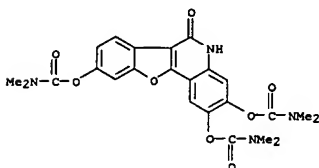


RN 129794-29-2 CAPLUS
 CN Carbamic acid, dimethyl-, 5,6-dihydro-6-oxobenzofuro[3,2-c]quinoline-3,10-diyl ester (9CI) (CA INDEX NAME)

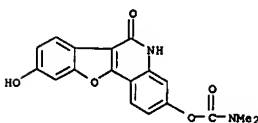
L7 ANSWER 106 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



RN 129794-30-5 CAPLUS
 CN Carbamic acid, dimethyl-, 5,6-dihydro-6-oxobenzofuro[3,2-c]quinoline-2,3,9-triyl ester (9CI) (CA INDEX NAME)

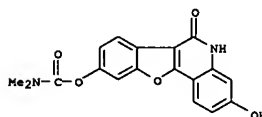


RN 129794-31-6 CAPLUS
 CN Carbamic acid, dimethyl-, 5,6-dihydro-9-hydroxy-6-oxobenzofuro[3,2-c]quinolin-3-yl ester (9CI) (CA INDEX NAME)

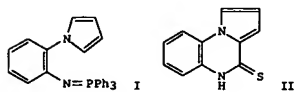


RN 129794-32-7 CAPLUS
 CN Carbamic acid, dimethyl-, 5,6-dihydro-3-hydroxy-6-oxobenzofuro[3,2-c]quinolin-9-yl ester (9CI) (CA INDEX NAME)

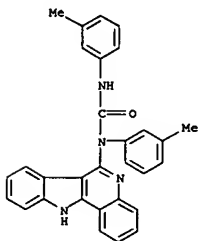
L7 ANSWER 106 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



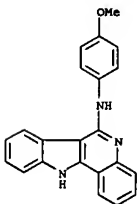
L7 ANSWER 107 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 1990:552369 CAPLUS
 DN 113:152369
 TI New methodology for the preparation of pyrrole and indole derivatives via iminophosphoranes: synthesis of pyrrolo[1,2-a]quinoxalines, indolo[3,2-c]quinolines and indolo[1,2-c]quinazolines
 AU Molina, Pedro; Alajarín, Mateo; Vidal, Angel
 CS Fac. Cienc., Univ. Murcia, Murcia, E-30071, Spain
 SO Tetrahedron (1990), 46(3), 1063-78
 CODEN: TETRA; ISSN: 0040-4020
 DT Journal
 LA English
 OS CASREACT 113:152369
 GI



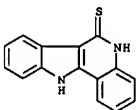
AB The preparation of title compds. by aza-Wittig reaction of iminophosphoranes with heterocumulene, e.g., isocyanates, CO₂ and CS₂, is reported. Thus, (phosphoroanilylcenaminophenyl)pyrrole I was treated with CS₂ in PhMe to give 88% pyrroloquinoxalinethione II.
 IT 128103-05-99
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
 (preparation and ethanolsis of)
 RN 128103-05-9 CAPLUS
 CN Urea, N-11H-indolo[3,2-c]quinolin-6-yl-N,N'-bis(3-methylphenyl)- (9CI) (CA INDEX NAME)



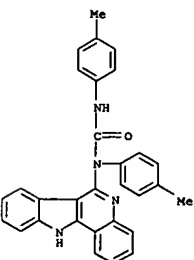
L7 ANSWER 107 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



RN 125188-01-4 CAPLUS
 CN 6H-Indolo[3,2-c]quinoline-6-thione, 5,11-dihydro- (9CI) (CA INDEX NAME)

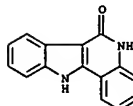


RN 128103-15-1 CAPLUS
 CN Urea, N-11H-indolo[3,2-c]quinolin-6-yl-N,N'-bis(4-methylphenyl)- (9CI) (CA INDEX NAME)

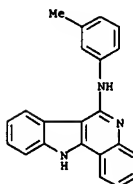


RN 128103-16-2 CAPLUS
 CN Urea, N-11H-indolo[3,2-c]quinolin-6-yl-N,N'-bis(3-methoxyphenyl)- (9CI)

L7 ANSWER 107 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)
 IT 18735-98-3P 125187-99-7P 125188-00-3P
 125188-01-4P 128103-15-1P 128103-16-2P
 128103-17-3P 128103-18-4P 128103-19-5P
 128103-23-1P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation of)
 RN 18735-98-3 CAPLUS
 CN 6H-Indolo[3,2-c]quinolin-6-one, 5,11-dihydro- (8CI, 9CI) (CA INDEX NAME)

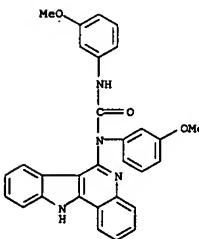


RN 125187-99-7 CAPLUS
 CN 11H-Indolo[3,2-c]quinolin-6-amine, N-(3-methylphenyl)- (9CI) (CA INDEX NAME)

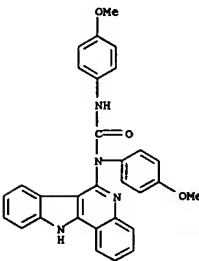


RN 125188-00-3 CAPLUS
 CN 11H-Indolo[3,2-c]quinolin-6-amine, N-(4-methoxyphenyl)- (9CI) (CA INDEX NAME)

L7 ANSWER 107 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)
 (CA INDEX NAME)

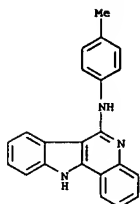


RN 128103-17-3 CAPLUS
 CN Urea, N-11H-indolo[3,2-c]quinolin-6-yl-N,N'-bis(4-methoxyphenyl)- (9CI) (CA INDEX NAME)

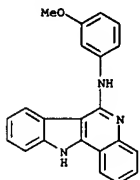


RN 128103-18-4 CAPLUS
 CN 11H-Indolo[3,2-c]quinolin-6-amine, N-(4-methylphenyl)- (9CI) (CA INDEX NAME)

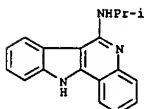
L7 ANSWER 107 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



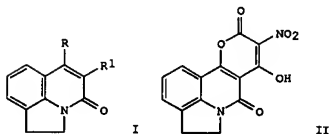
RN 128103-19-5 CAPLUS
CN 11H-Indolo[3,2-c]quinolin-6-amine, N-(3-methoxyphenyl)- (9CI) (CA INDEX NAME)



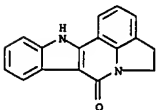
RN 128103-23-1 CAPLUS
CN 11H-Indolo[3,2-c]quinolin-6-amine, N-(1-methylethyl)- (9CI) (CA INDEX NAME)



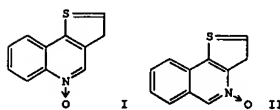
L7 ANSWER 109 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN
AN 1990:497421 CAPLUS
DN 113:97421
TI Quinolizines and indolizines. Part 16. Synthesis of pyrrolo[3,2,1-
i]quinolin-4-ones with potential fungicidal activity
AU Kappe, C. Oliver; Kappe, Thomas
CS Inst. Org. Chem., Univ. Graz, Graz, A-8010, Austria
SO Journal of Heterocyclic Chemistry (1989), 26(6), 1555-60
CODEN: JHTCAD; ISSN: 0022-152X
DT Journal
LA English
OS CASREACT 113:97421
GI



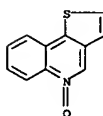
AB The synthesis for some derivs. of 1,2,5,6-tetrahydro-4H-pyrrolo[3,2,1-
i]quinolin-4-one (pyroquilon), e.g. I (R = AcO, NH2, R1 = H; R = OH, R1 = NO2, Cl) having potential fungicidal activity was accomplished starting with readily available
6-hydroxy-1,2-dihydro-4H-pyrrolo[3,2,1-i]quinolin-4-ones I (R = OH, R1 = H, Ph, PhCH2). Pyrrolo[3,2,1-i]pyrrolo[3,2-c]quinolines, e.g. II, were also prepared
IT 128099-86-5P
RL: SPN (Synthetic preparation); PREP (Preparation)
RN 128099-86-5 CAPLUS
CN Indolo[3,2-c]pyrrolo[3,2,1-i]quinolin-7(12H)-one, 4,5-dihydro- (9CI) (CA INDEX NAME)



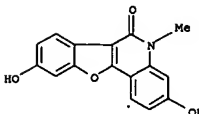
L7 ANSWER 108 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN
AN 1990:515133 CAPLUS
DN 113:115133
TI On the synthesis of thieno[3,2-c]quinoline N-oxide and thieno[3,2-c]isoquinoline N-oxide. The NMR spectra of the six isomeric thieno-fused quinoline and isoquinoline N-oxides
AU Gronowitz, Salo; Timari, Geza
CS Org. Chem. 1, Chem. Cent., Univ. Lund, Lund, S-221 00, Swed.
SO Journal of Heterocyclic Chemistry (1990), 27(4), 1127-9
CODEN: JHTCAD; ISSN: 0022-152X
DT Journal
LA English
OS CASREACT 113:115133
GI



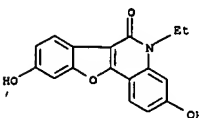
AB The synthesis of the two remaining isomeric monothieno analogs of phenanthridine N-oxide, thieno[3,2-c]quinoline N-oxide and thieno[3,2-c]isoquinoline N-oxide (I and II, resp.) is described. The 1H and 13C NMR spectra of all 6 isomeric thieno-fused quinoline and isoquinoline N-oxides are discussed.
IT 129224-61-9P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation and NMR of proton carbon-13 in)
RN 129224-61-9 CAPLUS
CN Thieno[3,2-c]quinoline, 5-oxide (9CI) (CA INDEX NAME)



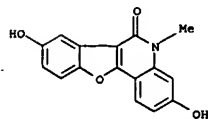
L7 ANSWER 110 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN
AN 1990:440500 CAPLUS
DN 113:40500
TI Potential estrogens and antiestrogens. Part 3. Ylides of heterocycles. Part 11. Palladium-catalyzed ring closure reactions to benzofurans: a new and effective approach to azacoumestrols
AU Stadlbauer, Wolfgang; Laschober, Rita; Kappe, Thomas
CS Inst. Org. Chem., Univ. Graz, Graz, A-8010, Austria
SO Liebig's Annalen der Chemie (1990), (6), 531-9
CODEN: LACHDL; ISSN: 0170-2041
DT Journal
LA German
OS CASREACT 113:40500
GI For diagram(s), see printed CA Issue.
AB Azacoumestans I (R = Me, Et; R1 = H, MeO) were synthesized using the following three methods: ring closure of 3-aryl-4-hydroxy-2-quinolones II by Pd-catalyzed cyclodehydrogenation, ring closure of 3-hydroxy-3-aryl-2,4-quinolinediones III by acid-catalyzed cyclodehydration, or ring closure of 4-aryloxy-3-iodo-quinolones IV (R = Me, Et, R1 = MeO, R3 = H; R2 = H, R3 = MeO) which were obtained by rearrangement of iodonium ylides V, by Pd-mediated cyclodehydrohalogenation. Only the latter reaction yielded the coumestrol analogs I (R = Me, Et; R1 = MeO) which have been transformed into the hydroxy and acetoxy derivs.
IT 125879-25-6P 125879-26-7P 125879-29-0P 125879-30-3P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
RN 125879-25-6 CAPLUS
CN Benzofuro[3,2-c]quinolin-6(5H)-one, 3,9-dihydroxy-5-methyl- (9CI) (CA INDEX NAME)



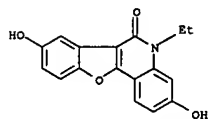
RN 125879-26-7 CAPLUS
CN Benzofuro[3,2-c]quinolin-6(5H)-one, 5-ethyl-3,9-dihydroxy- (9CI) (CA INDEX NAME)



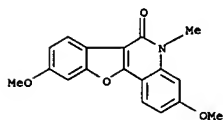
L7 ANSWER 110 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)
 RN 125879-29-0 CAPLUS
 CN Benzo[furo[3,2-c]quinolin-6(5H)-one, 3,8-dihydroxy-5-methyl- (9CI) (CA INDEX NAME)



RN 125879-30-3 CAPLUS
 CN Benzo[furo[3,2-c]quinolin-6(5H)-one, 5-ethyl-3,8-dihydroxy- (9CI) (CA INDEX NAME)

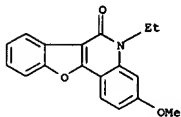


IT 125879-05-2P 125879-06-3P 125879-07-4P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
 (preparation and demethylation of)
 RN 125879-05-2 CAPLUS
 CN Benzo[furo[3,2-c]quinolin-6(5H)-one, 3,9-dimethoxy-5-methyl- (9CI) (CA INDEX NAME)

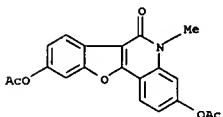


RN 125879-06-3 CAPLUS
 CN Benzo[furo[3,2-c]quinolin-6(5H)-one, 5-ethyl-3,9-dimethoxy- (9CI) (CA INDEX NAME)

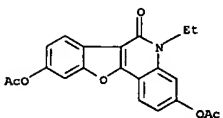
L7 ANSWER 110 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



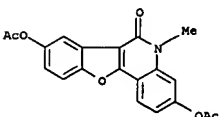
RN 125879-27-8 CAPLUS
 CN Benzo[furo[3,2-c]quinolin-6(5H)-one, 3,9-bis(acetyloxy)-5-methyl- (9CI) (CA INDEX NAME)



RN 125879-28-9 CAPLUS
 CN Benzo[furo[3,2-c]quinolin-6(5H)-one, 3,9-bis(acetyloxy)-5-ethyl- (9CI) (CA INDEX NAME)

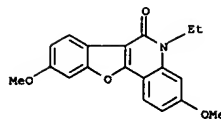


RN 125879-31-4 CAPLUS
 CN Benzo[furo[3,2-c]quinolin-6(5H)-one, 3,8-bis(acetyloxy)-5-methyl- (9CI) (CA INDEX NAME)

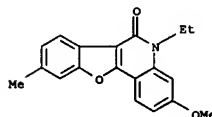


RN 125879-32-5 CAPLUS
 CN Benzo[furo[3,2-c]quinolin-6(5H)-one, 3,8-bis(acetyloxy)-5-ethyl- (9CI) (CA INDEX NAME)

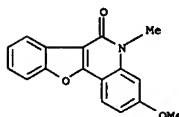
L7 ANSWER 110 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



RN 125879-07-4 CAPLUS
 CN Benzo[furo[3,2-c]quinolin-6(5H)-one, 5-ethyl-3-methoxy-9-methyl- (9CI) (CA INDEX NAME)

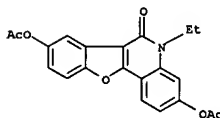


IT 125879-03-0P 125879-04-1P 125879-27-8P
 125879-28-9P 125879-31-4P 125879-32-5P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation of)
 RN 125879-03-0 CAPLUS
 CN Benzo[furo[3,2-c]quinolin-6(5H)-one, 3-methoxy-5-methyl- (9CI) (CA INDEX NAME)

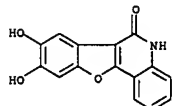


RN 125879-04-1 CAPLUS
 CN Benzo[furo[3,2-c]quinolin-6(5H)-one, 5-ethyl-3-methoxy- (9CI) (CA INDEX NAME)

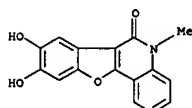
L7 ANSWER 110 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



L7 ANSWER 111 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 1990:423423 CAPLUS
 DN 113:23423
 TI Mushroom tyrosinase-catalyzed synthesis of coumestans, benzofuran derivatives, and related heterocyclic compounds
 AU Pandey, G.; Muralikrishna, C.; Bhalarao, U. T.
 CS Org. Div., Indian Inst. Chem. Technol., Hyderabad, 500 007, India
 SO Tetrahedron (1989), 45(21), 6867-74
 CODEN: TETRA; ISSN: 0040-4020
 DT Journal
 LA English
 OS CASREACT 113:23423
 AB Coumestan deriva., such as wedelolactone, 11-hydroxyaureol, 11-hydroxycoumestrol, along with benzofuran deriva. and related heterocyclic systems were prepared in high yield by coupling of o-quinone generated in situ from catechol by mushroom tyrosinase with various reactants.
 IT 86896-57-3P 127798-59-8P 127798-60-1P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation of)
 RN 86896-57-3 CAPLUS
 CN Benzofuro[3,2-c]quinolin-6(5H)-one, 8,9-dihydroxy- (9CI) (CA INDEX NAME)

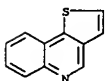


RN 127798-59-8 CAPLUS
 CN Benzofuro[3,2-c]quinolin-6(5H)-one, 8,9-dihydroxy-5-methyl- (9CI) (CA INDEX NAME)

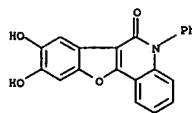


RN 127798-60-1 CAPLUS
 CN Benzofuro[3,2-c]quinolin-6(5H)-one, 8,9-dihydroxy-5-phenyl- (9CI) (CA INDEX NAME)

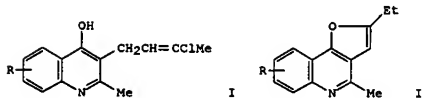
L7 ANSWER 112 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 1990:405570 CAPLUS
 DN 113:5570
 TI Natural abundance one-bond carbon-13-carbon-13 coupling constants and unambiguous assignments of carbon-13 NMR spectra of thieno[c]quinolines and thieno[c]isoquinolines
 AU Gronowitz, Salo; Servin, Rolf; Yang, Youhua
 CS Div. Org. Chem., Univ. Lund, Lund, S-221 00, Swed.
 SO Magnetic Resonance in Chemistry (1989), 27(11), 1099-101
 CODEN: MRCHG; ISSN: 0749-1581
 DT Journal
 LA English
 AB The one-bond 13C-13C coupling const. [1J(CC)] in all structurally possible thieno[c]quinolines, thieno[c]isoquinolines, phenanthridine, quinoline, and isoquinoline were measured at natural abundance by using the INADEQUATE pulse sequence technique. The unambiguous assignments of the 13C NMR spectra of thieno[c]quinolines and thieno[c]isoquinolines are reported.
 IT 234-43-5, Thieno[3,2-c]quinoline
 RL: FRP (Properties)
 (carbon-13 NMR of)
 RN 234-43-5 CAPLUS
 CN Thieno[3,2-c]quinoline (8CI, 9CI) (CA INDEX NAME)



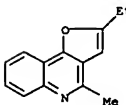
L7 ANSWER 111 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



L7 ANSWER 113 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 1990:216735 CAPLUS
 DN 112:216735
 TI Preparation of 2-ethyl-4-methylfuro[3,2-c]quinolines
 AU Gyl'budagyan, L. V.; Aleksanyan, I. L.
 CS Erevan. Gos. Univ., Yerevan, USSR
 SO Armyanskii Khimicheskii Zhurnal (1989), 42(6), 407-10
 CODEN: AYKZAN; ISSN: 0515-9628
 DT Journal
 LA Russian
 OS CASREACT 112:216735
 GI

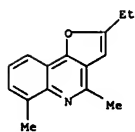


AB Intramol. electrophilic heterocyclization of (chlorobutenyl)methylquinolinols I (R = H, 6- and 8-Me and -MeO, 6-Cl, 8-Br) by pyridinium hydrochloride gave 69-80% furoquinolines II (same R), characterized as their hydrochlorides.
 IT 127139-44-0P 127139-45-1P 127139-46-2P
 127139-47-3P 127139-48-4P 127139-49-5P
 127139-50-8P 127139-51-9P 127139-52-0P
 127139-53-1P 127139-54-2P 127139-55-3P
 127139-56-4P 127139-57-5P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation of)
 RN 127139-44-0 CAPLUS
 CN Furo[3,2-c]quinoline, 2-ethyl-4-methyl- (9CI) (CA INDEX NAME)

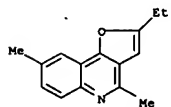


RN 127139-45-1 CAPLUS
 CN Furo[3,2-c]quinoline, 2-ethyl-4,6-dimethyl- (9CI) (CA INDEX NAME)

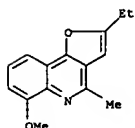
L7 ANSWER 113 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



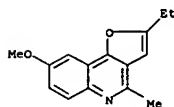
RN 127139-46-2 CAPLUS
CN Furo[3,2-c]quinoline, 2-ethyl-4,8-dimethyl- (9CI) (CA INDEX NAME)



RN 127139-47-3 CAPLUS
CN Furo[3,2-c]quinoline, 2-ethyl-6-methoxy-4-methyl- (9CI) (CA INDEX NAME)

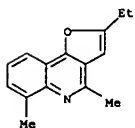


RN 127139-48-4 CAPLUS
CN Furo[3,2-c]quinoline, 2-ethyl-8-methoxy-4-methyl- (9CI) (CA INDEX NAME)



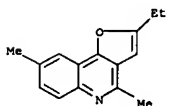
RN 127139-49-5 CAPLUS
CN Furo[3,2-c]quinoline, 8-bromo-2-ethyl-4-methyl- (9CI) (CA INDEX NAME)

L7 ANSWER 113 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



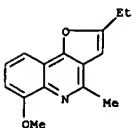
● HCl

RN 127139-53-1 CAPLUS
CN Furo[3,2-c]quinoline, 2-ethyl-4,8-dimethyl-, hydrochloride (9CI) (CA INDEX NAME)



● HCl

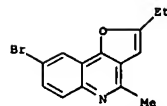
RN 127139-54-2 CAPLUS
CN Furo[3,2-c]quinoline, 2-ethyl-6-methoxy-4-methyl-, hydrochloride (9CI) (CA INDEX NAME)



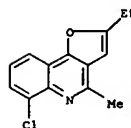
● HCl

RN 127139-55-3 CAPLUS
CN Furo[3,2-c]quinoline, 2-ethyl-8-methoxy-4-methyl-, hydrochloride (9CI) (CA INDEX NAME)

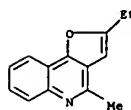
L7 ANSWER 113 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



RN 127139-50-8 CAPLUS
CN Furo[3,2-c]quinoline, 6-chloro-2-ethyl-4-methyl- (9CI) (CA INDEX NAME)



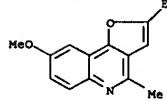
RN 127139-51-9 CAPLUS
CN Furo[3,2-c]quinoline, 2-ethyl-4-methyl-, hydrochloride (9CI) (CA INDEX NAME)



● HCl

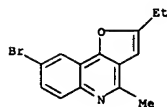
RN 127139-52-0 CAPLUS
CN Furo[3,2-c]quinoline, 2-ethyl-4,6-dimethyl-, hydrochloride (9CI) (CA INDEX NAME)

L7 ANSWER 113 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



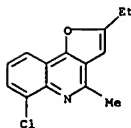
● HCl

RN 127139-56-4 CAPLUS
CN Furo[3,2-c]quinoline, 8-bromo-2-ethyl-4-methyl-, hydrochloride (9CI) (CA INDEX NAME)



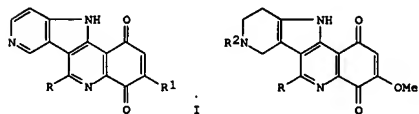
● HCl

RN 127139-57-5 CAPLUS
CN Furo[3,2-c]quinoline, 6-chloro-2-ethyl-4-methyl-, hydrochloride (9CI) (CA INDEX NAME)



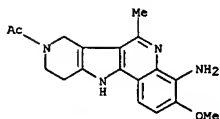
● HCl

L7 ANSWER 114 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 1990:216733 CAPLUS
 DN 112:216733
 TI Heterocyclic quinones. XVI. Pharmacomodulation in the series of 11H-indolo[3,2-c]quinolinediones: synthesis, cytotoxicity and antitumor activity of 3-substituted 11H-pyrido[3',4':4,5]pyrrolo[3,2-c]quinoline-1,4-diones
 AU Helissey, Phillippe; Giorgi-Renault, Sylviane; Renault, Jean; Cros, Suzanne
 CS Fac. Sci. Pharm. Biol., Univ. Rene Descartes, Paris, 75270, Fr.
 SO Chemical & Pharmaceutical Bulletin (1989), 37(9), 2413-16
 CODEN: CPBTAL; ISSN: 0009-2363
 DT Journal
 LA English
 OS CASREACT 112:216733
 GI

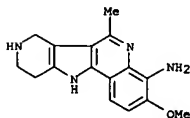


AB With the aim of obtaining new antitumor drugs more active than previously described 11H-indolo[3,2-c]quinoline-1,4-diones and 7,8,9,10-tetrahydro-11H-indolo[3,2-c]quinoline-1,4-diones, the synthesis and activities of a series of 3-substituted pyridopyrroloquinoline-1,4-diones I (R = H, Me, R1 = OMe, 4-methylpiperazino) and of 7,8,9,10-tetrahydro-11H-pyrido[3',4':4,5]pyrrolo[3,2-c]quinoline-1,4-diones II (R = H, Me, R2 = H, CH2Ph) were prepared. Some quinones were more cytotoxic in vitro towards L1210 leukemia cells but were not active in vivo towards murine P388 leukemia.
 IT 126983-48-0P 126983-49-1P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
 (preparation and oxidation of, with Fremy's salt)
 RN 126983-48-0 CAPLUS
 CN 7H-Pyrido[3',4':4,5]pyrrolo[3,2-c]quinolin-4-amine, 8,9,10,11-tetrahydro-3-methoxy-8-(phenylmethyl)- (9CI) (CA INDEX NAME)

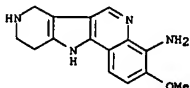
L7 ANSWER 114 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



IT 126983-53-7P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation, aromatization, or oxidation of, with Fremy's salt)
 RN 126983-53-7 CAPLUS
 CN 7H-Pyrido[3',4':4,5]pyrrolo[3,2-c]quinolin-4-amine, 8,9,10,11-tetrahydro-3-methoxy-6-methyl- (9CI) (CA INDEX NAME)

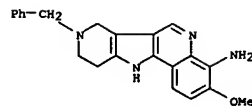


IT 126983-52-6P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation, aromatization, or oxidation with Fremy's salt)
 RN 126983-52-6 CAPLUS
 CN 7H-Pyrido[3',4':4,5]pyrrolo[3,2-c]quinolin-4-amine, 8,9,10,11-tetrahydro-3-methoxy- (9CI) (CA INDEX NAME)

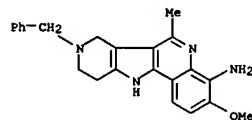


IT 126983-55-9P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation, cytotoxic activity, and oxidation of, with Fremy's salt)
 RN 126983-55-9 CAPLUS
 CN 11H-Pyrido[3',4':4,5]pyrrolo[3,2-c]quinolin-4-amine, 4-methoxy-6-methyl- (9CI) (CA INDEX NAME)

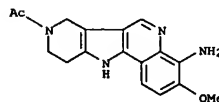
L7 ANSWER 114 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



RN 126983-49-1 CAPLUS
 CN 7H-Pyrido[3',4':4,5]pyrrolo[3,2-c]quinolin-4-amine, 8,9,10,11-tetrahydro-3-methoxy-6-methyl-8-(phenylmethyl)- (9CI) (CA INDEX NAME)

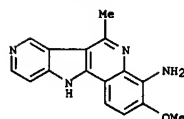


IT 126983-50-4P 126983-51-5P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
 (preparation and N-deacetylation of)
 RN 126983-50-4 CAPLUS
 CN 7H-Pyrido[3',4':4,5]pyrrolo[3,2-c]quinolin-4-amine, 8-acetyl-8,9,10,11-tetrahydro-3-methoxy- (9CI) (CA INDEX NAME)

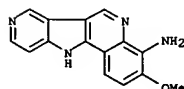


RN 126983-51-5 CAPLUS
 CN 7H-Pyrido[3',4':4,5]pyrrolo[3,2-c]quinolin-4-amine, 8-acetyl-8,9,10,11-tetrahydro-3-methoxy-6-methyl- (9CI) (CA INDEX NAME)

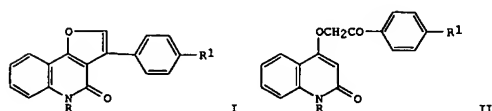
L7 ANSWER 114 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



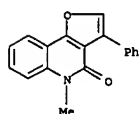
IT 126983-54-8P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation, oxidation with Fremy's salt, and cytotoxic activity of)
 RN 126983-54-8 CAPLUS
 CN 11H-Pyrido[3',4':4,5]pyrrolo[3,2-c]quinolin-4-amine, 3-methoxy- (9CI) (CA INDEX NAME)



L7 ANSWER 115 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 1990:216732 CAPLUS
 DN 112:216732
 TI A convenient synthesis of 3-aryl-4-oxo-4,5-dihydrofuro[3,2-c]quinolines
 AU Rao, V. Sudhakar; Darbarwar, Malleshwar
 CS Dep. Chem., Osmania Univ., Hyderabad, 500 007, India
 SO Synthetic Communications (1989), 19(15), 2713-19
 CODEN: SYNCAV; ISSN: 0039-7911
 DT Journal
 LA English
 OS CASREACT 112:216732
 GI

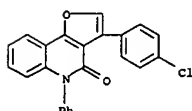


AB Title compds. I (R = Me, Ph; R1 = H, Me, Cl) were prepared in 41-56% yield by cyclodehydration of enol ethers II in polyphosphoric acid at 120°. II were obtained by phenacylation of 4-hydroxy-2(1H)-quinolinones.
 IT 126936-76-3P 126936-77-4P 126936-78-5P
 126936-79-6P 126936-80-9P 126936-81-0P
 RL: SPN (Synthetic preparation); PREP (Preparation) (preparation of)
 RN 126936-76-3 CAPLUS
 CN Furo[3,2-c]quinolin-4(5H)-one, 5-methyl-3-phenyl- (9CI) (CA INDEX NAME)

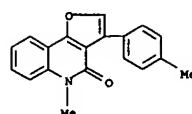


RN 126936-77-4 CAPLUS
 CN Furo[3,2-c]quinolin-4(5H)-one, 5-methyl-3-(4-methylphenyl)- (9CI) (CA INDEX NAME)

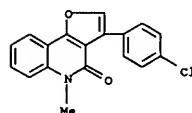
L7 ANSWER 115 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)
 CN Furo[3,2-c]quinolin-4(5H)-one, 3-(4-chlorophenyl)-5-phenyl- (9CI) (CA INDEX NAME)



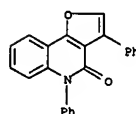
L7 ANSWER 115 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



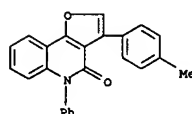
RN 126936-78-5 CAPLUS
 CN Furo[3,2-c]quinolin-4(5H)-one, 3-(4-chlorophenyl)-5-methyl- (9CI) (CA INDEX NAME)



RN 126936-79-6 CAPLUS
 CN Furo[3,2-c]quinolin-4(5H)-one, 3,5-diphenyl- (9CI) (CA INDEX NAME)

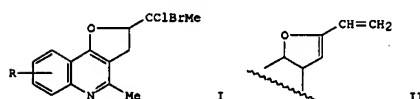


RN 126936-80-9 CAPLUS
 CN Furo[3,2-c]quinolin-4(5H)-one, 3-(4-methylphenyl)-5-phenyl- (9CI) (CA INDEX NAME)

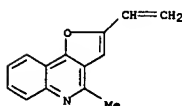


RN 126936-81-0 CAPLUS

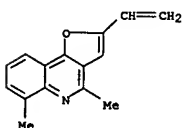
L7 ANSWER 116 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 1990:216731 CAPLUS
 DN 112:216731
 TI Preparation of 4-methyl-2-vinylfuro[3,2-c]quinolines
 AU Gyl'budagyan, L. V.; Aleksanyan, I. L.
 CS Erevan. Gos. Univ., Yerevan, USSR
 SO Armyanskii Khimicheskii Zhurnal (1989), 42(5), 334-6
 CODEN: AYKZAN; ISSN: 0515-9628
 DT Journal
 LA Russian
 OS CASREACT 112:216731
 GI



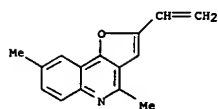
AB Refluxing furoquinolines I (R = H, 6-Me, 8-Me, 6-MeO, 8-MeO, 6-Cl, 8-Br) with Et3N in DMF gave 76-88% vinyl derivs. II.
 IT 126491-81-4P 126491-82-5P 126491-83-6P
 126491-84-7P 126491-85-8P 126491-86-9P
 126491-87-0P
 RL: SPN (Synthetic preparation); PREP (Preparation) (preparation of)
 RN 126491-81-4 CAPLUS
 CN Furo[3,2-c]quinoline, 2-ethenyl-4-methyl- (9CI) (CA INDEX NAME)



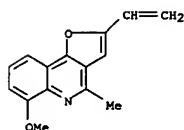
RN 126491-82-5 CAPLUS
 CN Furo[3,2-c]quinoline, 2-ethenyl-4,6-dimethyl- (9CI) (CA INDEX NAME)



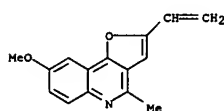
L7 ANSWER 116 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)
 RN 126491-83-6 CAPLUS
 CN Furo[3,2-c]quinoline, 2-ethenyl-4,8-dimethyl- (9CI) (CA INDEX NAME)



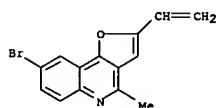
RN 126491-84-7 CAPLUS
 CN Furo[3,2-c]quinoline, 2-ethenyl-6-methoxy-4-methyl- (9CI) (CA INDEX NAME)



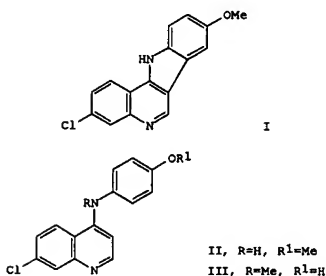
RN 126491-85-8 CAPLUS
 CN Furo[3,2-c]quinoline, 2-ethenyl-8-methoxy-4-methyl- (9CI) (CA INDEX NAME)



RN 126491-86-9 CAPLUS
 CN Furo[3,2-c]quinoline, 8-bromo-2-ethenyl-4-methyl- (9CI) (CA INDEX NAME)



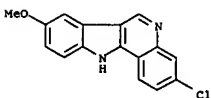
L7 ANSWER 117 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 1990:204564 CAPLUS
 DN 112:204564
 TI Some physicochemical parameters of 11H-indolo[3,2-c]quinoline
 AU Lin, Go Mei; Lan, Ngiam Tong
 CS Dep. Pharm., Natl. Univ. Singapore, Singapore, 0511, Singapore
 SO Heterocycles (1989), 29(12), 2353-9
 CODEN: HETCYM; ISSN: 0385-5414
 DT Journal
 LA English
 GI



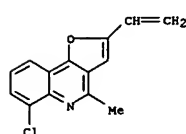
AB Hydrophobicity, limiting solubility, and dissociation consts. of I, II, and III are discussed in relation to their structure. The data obtained should be useful in the area of drug delivery.

IT 116792-06-4
 RL: PREP (Properties)
 (physicochem. properties of, structure in relation to)

RN 116792-06-4 CAPLUS
 CN 11H-Indolo[3,2-c]quinoline, 3-chloro-8-methoxy- (9CI) (CA INDEX NAME)



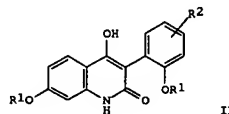
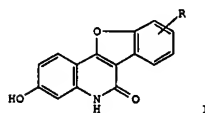
L7 ANSWER 116 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)
 RN 126491-87-0 CAPLUS
 CN Furo[3,2-c]quinoline, 6-chloro-2-ethenyl-4-methyl- (9CI) (CA INDEX NAME)



L7 ANSWER 118 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 1990:118798 CAPLUS
 DN 112:118798
 TI Preparation of benzofuro[3,2-c]quinolines for treatment of osteoporosis
 IN Kamiyo, Tetsukyo; Tsubaki, Atsushi
 PA Kissei Pharmaceutical Co., Ltd., Japan
 SO Jpn. Kokai Tokkyo Koho, 4 pp.
 CODEN: JKOKXAF
 DT Patent
 LA Japanese
 FAN.CNT 1

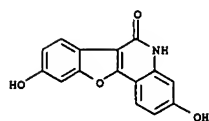
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 01242585	A2	19890927	JP 1988-68468	19880323
JP 1988-68468		19880323		
MARPAT 112:118798				

 GI

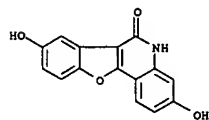


AB The title compds. I (R = H, OH), useful for treatment of osteoporosis (no data), are prepared by treating quinolines II (R1 = H, lower alkyl; R2 = H, OH, lower alkoxy) with aqueous HBr. Thus, aqueous HBr containing 2.9 g II (R1 = Me, R2 = 4-OMe) was refluxed at 140° for 6 days to give 2.1 g I (R = 9-OH).
 IT 92741-84-9P 119376-00-OP 119376-03-3P
 RL: SYN (Synthetic preparation); PREP (Preparation)
 (preparation of, for treatment of osteoporosis)
 RN 92741-84-9 CAPLUS
 CN Benzofuro[3,2-c]quinolin-6(5H)-one, 3,9-dihydroxy- (9CI) (CA INDEX NAME)

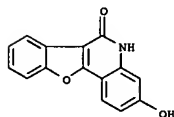
L7 ANSWER 118 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



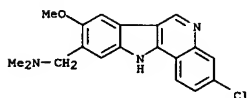
RN 119376-00-0 CAPLUS
CN Benzofuro[3,2-c]quinolin-6(5H)-one, 3,8-dihydroxy- (9CI) (CA INDEX NAME)



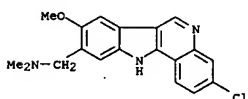
RN 119376-03-3 CAPLUS
CN Benzofuro[3,2-c]quinolin-6(5H)-one, 3-hydroxy- (9CI) (CA INDEX NAME)



L7 ANSWER 119 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

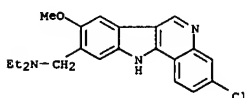


RN 125654-62-8 CAPLUS
CN 1H-Indolo[3,2-c]quinoline-9-methanamine, 3-chloro-8-methoxy-N,N-dimethyl-, monohydrochloride (9CI) (CA INDEX NAME)



● HCl

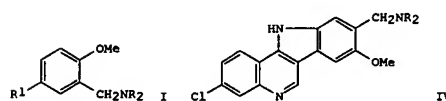
RN 125654-63-9 CAPLUS
CN 1H-Indolo[3,2-c]quinoline-9-methanamine, 3-chloro-N,N-diethyl-8-methoxy-, monohydrochloride (9CI) (CA INDEX NAME)



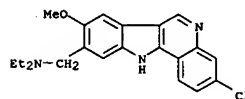
● HCl

L7 ANSWER 119 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN

AN 1990:118684 CAPLUS
DN 112:118684
TI Synthesis of 3-chloro-8-methoxy-9-dialkylaminomethyl-1H-indolo[3,2-c]quinoline with expected biological activity
AU Ibrahim, E. S. I.; Orabi, M. O. A.; Elbadawy, M.
CS Fac. Sci., Suez Canal Univ., Ismailia, Egypt
SO Delta Journal of Science (1987), 11(4), 1984-97
CODEN: DJSCEJ; ISSN: 1012-5965
DT Journal
LA English
GI



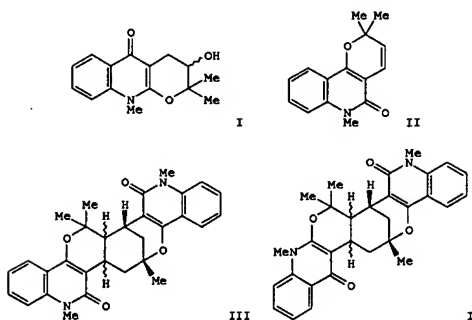
AB 4-Nitroanisole was chloromethylated and the product reacted with dialkylamines to give 5-nitro-2-methoxy-N,N-dialkylbenzylamines I (R = Me, Et, R1 = NO2) (II). Reduction of II gave 5-amino-2-methoxy-N,N-dialkylbenzylamines I (R1 = NH2), which were diazotized and reduced to give 5-hydrazino-2-methoxy-N,N-dialkylbenzylamines I (R1 = NHNH2) (III). Condensation of III and 7-chloro-1,2,3,4-tetrahydroquinolin-4-one gave the title compound IV.
IT 34374-22-6P 64398-24-9P 125654-62-8P 125654-63-9P
RL: SPN (Synthetic preparation); PREP (Preparation) (preparation of)
RN 34374-22-6 CAPLUS
CN 1H-Indolo[3,2-c]quinoline-9-methanamine, 3-chloro-N,N-diethyl-8-methoxy- (9CI) (CA INDEX NAME)



RN 64398-24-9 CAPLUS
CN 1H-Indolo[3,2-c]quinoline-9-methanamine, 3-chloro-8-methoxy-N,N-dimethyl- (9CI) (CA INDEX NAME)

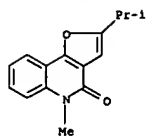
L7 ANSWER 120 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN

AN 1990:98917 CAPLUS
DN 112:98917
TI Dehydration of hydroxy-hemiterpenoid quinoline alkaloids and synthesis of paraensidimerines
AU Ngadjui, Bonaventure Tchaleu; Ayafor, Johnson Foyere; Mitaku, Sofia; Skaltsounis, Alexios Leandros; Tillequin, Francois; Koch, Michel
CS Dep. Chim. Org., Fac. Sci., Yaounde, Cameroon
SO Journal of Natural Products (1989), 52(2), 300-5
CODEN: JNPRDF; ISSN: 0163-3864
DT Journal
LA English
OS CASREACT 112:98917
GI



AB The dehydration reaction of ribalinine (I) and 3-(2-hydroxy-3-methylbut-3-en-1-yl)-4-hydroxy-1-methyl-2-quinolone was studied. In the attempts towards this dehydration using mesyl chloride, ribalinine mesylate and atalopine mesylate were obtained. N-Methylflindersine (II) and its furan isomer were obtained by acid fusion of I. Thermal dimerization of II to paraensidimerines A, C, D, and F III, previously isolated from Euxylophora poeaeensis along with 3 new ones, paraensidimerines A', C', and F' IV.
IT 98751-20-3P
RL: SPN (Synthetic preparation); PREP (Preparation) (preparation of)
RN 98751-20-3 CAPLUS
CN Furo[3,2-c]quinolin-4(5H)-one, 5-methyl-2-(1-methylethyl)- (9CI) (CA INDEX NAME)

L7 ANSWER 120 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



L7 ANSWER 121 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN

AN 1990:77111 CAPLUS

DN 112:77111

TI Ortho-Pyrrolylphenyl heterocumulenes: preparation and cyclization to fused

pyrroles

AU Molina, Pedro; Alajarin, Mateo; Vidal, Angel

CS Fac. Cienc. Quim., Univ. Murcia, Murcia, 30071, Spain

SO Tetrahedron Letters (1989), 30(21), 2847-50

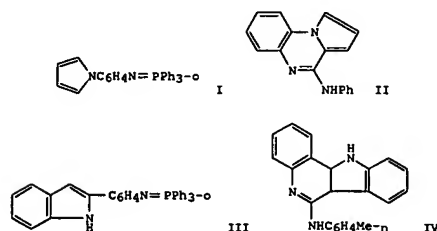
CODEN: TELEAY; ISSN: 0040-4039

DT Journal

LA English

OS CASREACT 112:77111

GI



AB The azo-Wittig reaction of iminophosphoranes derived from o-(1-pyrrolyl)phenyl azide and 2-(o-aminophenyl)indole with isocyanates, isothiocyanates, CO₂, or CS₂ leads to functionalized pyrrolo[1,2-a]quinoxalines and 11H-indolo[3,2-c]quinolines, resp. Thus, iminophosphorane I and PhNCS give, after heating the 1st-formed adduct to 180°, pyrroloquinoxaline II. Iminophosphorane III and m-MeC₆H₄NCS give indoloquinoline IV directly.

IT 125187-99-7 125187-99-7 125188-00-3 125188-01-4

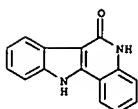
RL: SPN (Synthetic preparation); PREP (Preparation)

(preparation of)

RN 18735-98-3 CAPLUS

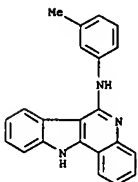
CN 6H-Indolo[3,2-c]quinolin-6-one, 5,11-dihydro- (8CI, 9CI) (CA INDEX NAME)

L7 ANSWER 121 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



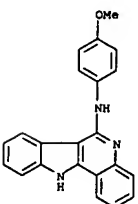
RN 125187-99-7 CAPLUS

CN 11H-Indolo[3,2-c]quinolin-6-amine, N-(3-methylphenyl)- (9CI) (CA INDEX NAME)



RN 125188-00-3 CAPLUS

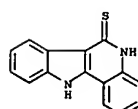
CN 11H-Indolo[3,2-c]quinolin-6-amine, N-(4-methoxyphenyl)- (9CI) (CA INDEX NAME)



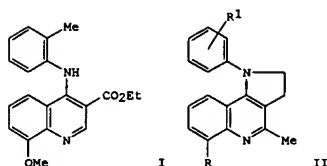
RN 125188-01-4 CAPLUS

CN 6H-Indolo[3,2-c]quinoline-6-thione, 5,11-dihydro- (9CI) (CA INDEX NAME)

L7 ANSWER 121 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

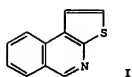


L7 ANSWER 122 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 1990:48250 CAPLUS
 DN 112:48250
 TI Reversible inhibitors of the gastric (H⁺/K⁺)-ATPase. 1.
 1-Aryl-4-methylpyrrolo[3,2-c]quinolines as conformationally restrained
 analogs of 4-(arylamino)quinolines
 AU Brown, Thomas H.; Ife, Robert J.; Keeling, David J.; Leing, Shiona M.;
 Leach, Colin A.; Parsons, Michael E.; Price, Carolyn A.; Reavill, David
 R.; Wiggall, Kenneth J.
 CS Dep. Med. Chem., Smith Kline and French Res. Ltd., Welwyn/Herts., AL6
 9AR,
 UK
 SO Journal of Medicinal Chemistry (1990), 33(2), 527-33
 CODEN: JMCMAH; ISSN: 0022-2623
 DT Journal
 LA English
 GI

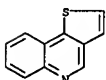


AB I, previously described as an antiulcer compound, is an inhibitor of the
 gastric (H⁺/K⁺)-ATPase. It is postulated that 1-arylpyrrolo[3,2-
 c]quinolines (II, R = e.g., H, OMe, OH and R¹ = H, 2-Me, 2-OMe) act as
 conformationally restrained analogs of I. A series of derivs. of II were
 prepared and shown to be potent inhibitors of the target enzyme in vitro.
 Substitution in the ortho position of the aryl ring is important for
 activity. Unsatur. in the 5-membered ring makes little difference, but
 introduction of heteroatoms into the same ring markedly reduces activity.
 In more detailed kinetic expts., one of the II derivs. (R = OMe, and R¹ =
 2-Me) and I both show reversible, K⁺-competitive binding to the enzyme,
 with submicromolar K_i values. The compds. appear to act at the luminal
 face of the enzyme, and to require protonation for activity. Several
 compds. in the series are shown to be potent inhibitors of
 pentagastrin-stimulated acid secretion in the rat.
 IT 110059-89-7DP, derivs.
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation of and stomach acid secretion and ATPase inhibition by,
 structure in relation to)
 RN 110059-89-7 CAPLUS
 CN 1H-Pyrrolo[3,2-c]quinoline, 4-methyl-1-phenyl- (6CI, 9CI) (CA INDEX
 NAME)

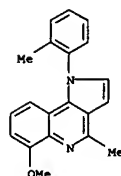
L7 ANSWER 123 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 1990:35717 CAPLUS
 DN 112:35717
 TI The first synthesis of thieno[c]isoquinolines and an improved synthesis
 of
 phenanthridine and thieno[c]quinolines through palladium(0) catalyzed
 coupling of o-formylarylboronic acids with functionalized aryl halides
 AU Yang, Youhua; Hoernfeldt, Anna Britta; Gronowitz, Salo
 CS Chem. Cent., Univ. Lund, Lund, S-22100, Swed.
 SO Journal of Heterocyclic Chemistry (1989), 26(3), 865-8
 CODEN: JHTCAD; ISSN: 0022-152X
 DT Journal
 LA English
 OS CASREACT 112:35717
 GI



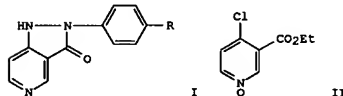
AB All three isomeric hitherto unknown thieno[c]isoquinolines, e.g. I, have
 been synthesized in high yields by the Pd(0)-catalyzed coupling of
 2-ORCC6H4B(OH)₂ with N-(o-halothenyl)carbamates. When 2-BrC6H4NHAc was
 coupled with o-formylarylboronic acids under Pd catalysis,
 phenanthridine,
 and thieno[c]quinolines were obtained in improved yields. Total
 assignments of 1H NMR spectra of thieno[c]isoquinolines and
 thieno[c]quinolines are reported.
 IT 234-43-5P, Thieno[3,2-c]quinoline
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation of)
 RN 234-43-5 CAPLUS
 CN Thieno[3,2-c]quinoline (8CI, 9CI) (CA INDEX NAME)



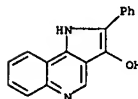
L7 ANSWER 122 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)
 IT 122456-27-3P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation of and stomach acid secretion and ATPase inhibition by,
 structure in relation to)
 RN 122456-27-3 CAPLUS
 CN 1H-Pyrrolo[3,2-c]quinoline, 6-methoxy-4-methyl-1-(2-methylphenyl)- (9CI)
 (CA INDEX NAME)



L7 ANSWER 124 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 1990:7449 CAPLUS
 DN 112:7449
 TI Synthesis of heterocyclic compounds isosterically related to
 pyrazolo[4,3-c]quinolines as benzodiazepine receptor ligands
 AU Shindo, Hirohisa; Fujishita, Toshio; Sasatani, Takashi; Chomei, Nobuo;
 Takada, Susumu
 CS Shionogi Res. Lab., Shionogi and Co., Ltd., Osaka, 553, Japan
 SO Heterocycles (1989), 29(5), 899-912
 CODEN: HETCYM; ISSN: 0365-5414
 DT Journal
 LA English
 OS CASREACT 112:7449
 GI



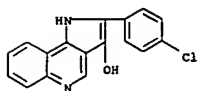
AB Fused pyridine and pyrimidine derivs. have been synthesized which are
 isosterically related to pyrazolo[4,3-c]quinolines with the high affinity
 to the benzodiazepine receptor. Thus, pyrazolopyridines I (R = H, Cl)
 were prepared from Et 4-chloronicotinate N-oxide (II).
 IT 124031-20-5P 124031-21-6P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation and benzodiazepine receptor binding affinity of)
 RN 124031-20-5 CAPLUS
 CN 1H-Pyrrolo[3,2-c]quinolin-3-ol, 2-phenyl-, monohydrochloride (9CI) (CA
 INDEX NAME)



● HCl

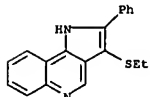
RN 124031-21-6 CAPLUS
 CN 1H-Pyrrolo[3,2-c]quinolin-3-ol, 2-(4-chlorophenyl)-, monohydrochloride
 (9CI) (CA INDEX NAME)

L7 ANSWER 124 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

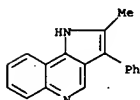


● HCl

IT 124031-08-9P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
 (preparation and desulfurization of)
 RN 124031-08-9 CAPLUS
 CN 1H-Pyrrolo[3,2-c]quinoline, 3-(ethylthio)-2-phenyl- (9CI) (CA INDEX NAME)

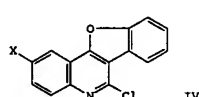
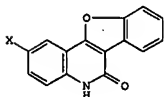
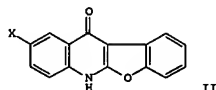
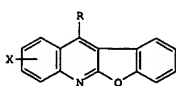


IT 68500-25-4P 124031-07-9P 124031-09-0P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation of)
 RN 68500-25-4 CAPLUS
 CN 1H-Pyrrolo[3,2-c]quinoline, 2-methyl-3-phenyl- (9CI) (CA INDEX NAME)



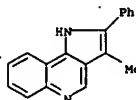
RN 124031-07-8 CAPLUS
 CN 1H-Pyrrolo[3,2-c]quinoline, 3-methyl-2-phenyl- (9CI) (CA INDEX NAME)

L7 ANSWER 125 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN
 RN 1990:7402 CAPLUS
 DN 112:7402
 TI The synthesis of benzofuroquinolines. IV. Some halobenzofuro[2,3-b]-and [3,2-c]quinoline derivatives
 AU Ohhira, Yutaka; Kawase, Yoshiyuki
 CS Fac. Sci., Toyama Univ., Toyama, 930, Japan
 SO Journal of Heterocyclic Chemistry (1989), 26(2), 281-4
 CODEN: JHTCAD; ISSN: 0022-152X
 DT Journal
 LA English
 OS CASREACT 112:7402
 GI

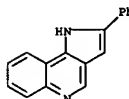


AB Halobenzofuro[2,3-b]quinolines I (R = H; X = 8-F, 8-Cl, 9-F, 9-Cl) and halobenzofuro[2,3-b]quinolinecarboxylic acids I (R = CO₂H; X = 9-F, 9-Cl) were synthesized from 6- or 7-halo-3-(2-methoxyphenyl)-2-oxo-1,2-dihydroquinoline-4-carboxylic acids. Halo-11(6H)-benzofuro[2,3-b]quinolines II (X = F, Cl, Br) and halo-6(5H)-benzofuro[3,2-c]quinolinone III (X = F, Cl, Br) were synthesized from 6-halo-4-hydroxy-3-(2-methoxyphenyl)-2(1H)-quinolinone, and converted to the corresponding chlorohalobenzofuroquinolines I (R = Cl, X = 9-F, 9-Cl, 9-Br) and IV (X = F, Cl, Br).
 IT 124028-61-1P 124028-62-2P 124028-63-3P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
 (preparation and chlorination of)
 RN 124028-61-1 CAPLUS
 CN Benzofuro[3,2-c]quinolin-6(5H)-one, 2-fluoro- (9CI) (CA INDEX NAME)

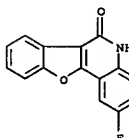
L7 ANSWER 124 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



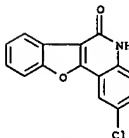
RN 124031-09-0 CAPLUS
 CN 1H-Pyrrolo[3,2-c]quinoline, 2-phenyl- (9CI) (CA INDEX NAME)



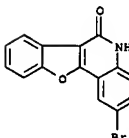
L7 ANSWER 125 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



RN 124028-62-2 CAPLUS
 CN Benzofuro[3,2-c]quinolin-6(5H)-one, 2-chloro- (9CI) (CA INDEX NAME)

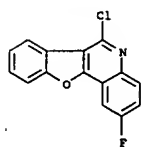


RN 124028-63-3 CAPLUS
 CN Benzofuro[3,2-c]quinolin-6(5H)-one, 2-bromo- (9CI) (CA INDEX NAME)

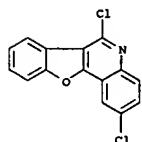


IT 124028-56-4P 124028-57-5P 124028-58-6P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation of)
 RN 124028-56-4 CAPLUS
 CN Benzofuro[3,2-c]quinoline, 6-chloro-2-fluoro- (9CI) (CA INDEX NAME)

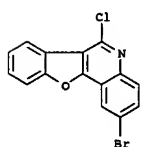
L7 ANSWER 125 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



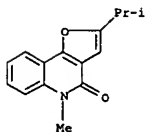
RN 124028-57-5 CAPLUS
CN Benzofuro[3,2-c]quinoline, 2,6-dichloro- (9CI) (CA INDEX NAME)



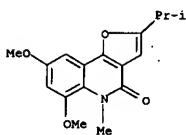
RN 124028-58-6 CAPLUS
CN Benzofuro[3,2-c]quinoline, 2-bromo-6-chloro- (9CI) (CA INDEX NAME)



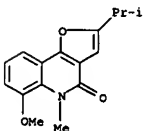
L7 ANSWER 126 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



RN 123613-66-1 CAPLUS
CN Furo[3,2-c]quinolin-4(5H)-one, 6,8-dimethoxy-5-methyl-2-(1-methylethyl)- (9CI) (CA INDEX NAME)



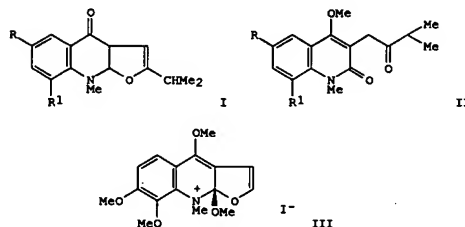
RN 123613-69-4 CAPLUS
CN Furo[3,2-c]quinolin-4(5H)-one, 6-methoxy-5-methyl-2-(1-methylethyl)- (9CI)
(CA INDEX NAME)



RN 123613-78-5 CAPLUS
CN Furo[3,2-c]quinolin-4(5H)-one, 8-methoxy-5-methyl-2-(1-methylethyl)- (9CI)
(CA INDEX NAME)

L7 ANSWER 126 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN

AN 1989:614780 CAPLUS
DN 111:214780
TI Quinoline alkaloids. Part 26. Pseudobases from the reaction of furoquinolinones with methyl iodide. A new route to 3-(3-methyl-2-oxobutyl)quinolin-2(1H)-ones
AU Gaston, John L.; Grundon, Michael F.
CS Dep. Chem., Univ. Ulster, Coleraine, UK
SO Journal of the Chemical Society, Perkin Transactions 1: Organic and Bio-Organic Chemistry (1972-1999) (1989), (5), 905-8
CODEN: JCPRB4; ISSN: 0300-922X
DT Journal
LA English
OS CASREACT 111:214780
GI



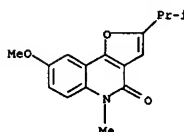
AB Reaction of 2-isopropyl-9-methylfuro[2,3-b]quinolin-4(9H)-ones I (R, R1 = H, MeO) with MeI gave salts believed to be pseudobase hydriodides, which were converted with base into 4-methoxy-1-methyl-3-(3-methyl-2-oxobutyl)quinolin-2(1H)-ones II; the analogous pseudobase derivative III from

the furoquinoline alkaloid skimmianine gives the furoquinolin-4-one isoskimmianine on further reaction with MeI. The mechanism of these reactions and the acid-catalyzed rearrangement of furoquinolinones I are discussed.

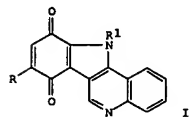
IT 98751-20-3P 123613-66-1P 123613-69-4P
123613-78-5P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)

RN 98751-20-3 CAPLUS
CN Furo[3,2-c]quinolin-4(5H)-one, 5-methyl-2-(1-methylethyl)- (9CI) (CA INDEX NAME)

L7 ANSWER 126 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



L7 ANSWER 127 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 1989:594633 CAPLUS
 DN 111:194633
 TI Heterocyclic quinones. XIV. Pharmacomodulation in a series of
 11H-indolo[3,2-c]quinoline-7,10-diones: synthesis and cytotoxicity of
 8-substituted 11H-indolo[3,2-c]quinoline-7,10-diones
 AU Heliassey, Philippe; Giorgi-Renault, Sylviane; Renault, Jean; Cros,
 Suzanne
 CS Fac. Sci. Pharm. Biol., Univ. Rene Descartes, Paris, 75270, Fr.
 SO Chemical & Pharmaceutical Bulletin (1989), 37(3), 675-9
 CODEN: CPBTAL; ISSN: 0009-2363
 DT Journal
 LA English
 OS CASREACT 111:194633
 GI



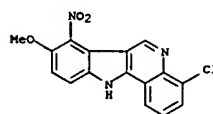
AB 4-Chloro-8-methoxy-11H-indolo[3,2-c]quinoline could be obtained from
 8-chloro-2,3-dihydro-1H-quinolin-4-one and 4-methoxyphenylhydrazine by
 Fischer's indole synthesis. Its nitration led to the 7-nitro derivative
 which
 was reduced to 7-amino-4-chloro-8-methoxy-11H-indolo[3,2-c]quinoline when
 Raney Ni was employed as a catalyst and to 7-amino-8-methoxy-11H-
 indolo[3,2-c]quinoline with Pd/C. Oxidation of the amines by Fremy's
 salt

produced the corresponding 11H-indolo[3,2-c]quinoline-7,10-diones I (R =
 OMe, R1 = H, Me). Displacement of the methoxy group by H2N(CH2)2NMe2 or
 by N-methylpiperazine afforded the 8-aminoquinones I (R = NH(CH2)2NMe2,
 4-methylpiperazine, R1 = H, Me). The quinones unsubstituted at the
 4-position were more cytotoxic than the previously described
 2-methoxy-11H-indolo[3,2-c]quinoline-1,4-diones.

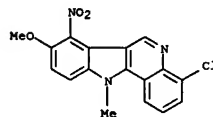
IT 123530-91-6P 123530-92-7P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
 (Reactant or reagent)

(preparation and catalytic hydrogenation of)
 RN 123530-91-6 CAPLUS
 CN 11H-Indolo[3,2-c]quinoline, 4-chloro-8-methoxy-7-nitro- (9CI) (CA INDEX
 NAME)

L7 ANSWER 127 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

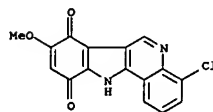


RN 123530-92-7 CAPLUS
 CN 11H-Indolo[3,2-c]quinoline, 4-chloro-8-methoxy-11-methyl-7-nitro- (9CI)
 (CA INDEX NAME)



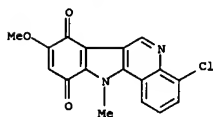
IT 123531-01-1P 123531-02-2P 123531-05-5P
 123531-06-6P 123531-07-7P 123531-08-8P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation and cytotoxic activity of)

RN 123531-01-1 CAPLUS
 CN 7H-Indolo[3,2-c]quinoline-7,10(11H)-dione, 4-chloro-8-methoxy- (9CI) (CA
 INDEX NAME)

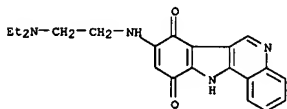


RN 123531-02-2 CAPLUS
 CN 7H-Indolo[3,2-c]quinoline-7,10(11H)-dione, 4-chloro-8-methoxy-11-methyl-
 (9CI) (CA INDEX NAME)

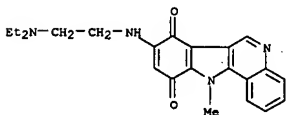
L7 ANSWER 127 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



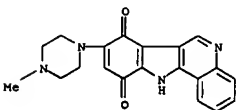
RN 123531-05-5 CAPLUS
 CN 7H-Indolo[3,2-c]quinoline-7,10(11H)-dione, 8-[[2-(
 diethylamino)ethyl]amino]- (9CI) (CA INDEX NAME)



RN 123531-06-6 CAPLUS
 CN 7H-Indolo[3,2-c]quinoline-7,10(11H)-dione, 8-[[2-(
 diethylamino)ethyl]amino]-11-methyl- (9CI) (CA INDEX NAME)

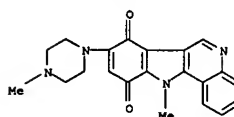


RN 123531-07-7 CAPLUS
 CN 7H-Indolo[3,2-c]quinoline-7,10(11H)-dione, 8-(4-methyl-1-piperazinyl)-
 (9CI) (CA INDEX NAME)



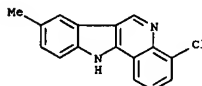
RN 123531-08-8 CAPLUS
 CN 7H-Indolo[3,2-c]quinoline-7,10(11H)-dione, 11-methyl-8-(4-methyl-1-
 piperazinyl)- (9CI) (CA INDEX NAME)

L7 ANSWER 127 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

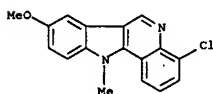


IT 123530-87-0P 123530-88-1P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
 (Reactant or reagent)
 (preparation and nitration of)

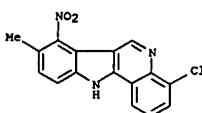
RN 123530-87-0 CAPLUS
 CN 11H-Indolo[3,2-c]quinoline, 4-chloro-8-methyl- (9CI) (CA INDEX NAME)



RN 123530-88-1 CAPLUS
 CN 11H-Indolo[3,2-c]quinoline, 4-chloro-8-methoxy-11-methyl- (9CI) (CA
 INDEX NAME)

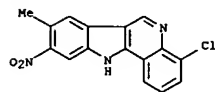


IT 123530-93-8P 123530-94-9P 123530-95-0P
 123530-96-1P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation of)
 RN 123530-93-8 CAPLUS
 CN 11H-Indolo[3,2-c]quinoline, 4-chloro-8-methyl-7-nitro- (9CI) (CA INDEX
 NAME)

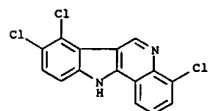


L7 ANSWER 127 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

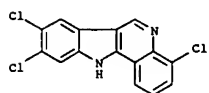
RN 123530-94-9 CAPLUS
 CN 11H-Indolo[3,2-c]quinoline, 4-chloro-8-methyl-9-nitro- (9CI) (CA INDEX NAME)



RN 123530-95-0 CAPLUS
 CN 11H-Indolo[3,2-c]quinoline, 4,7,8-trichloro- (9CI) (CA INDEX NAME)

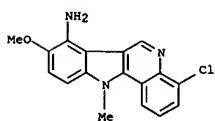


RN 123530-96-1 CAPLUS
 CN 11H-Indolo[3,2-c]quinoline, 4,8,9-trichloro- (9CI) (CA INDEX NAME)

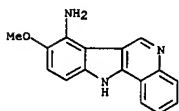


IT 123531-03-3P 123531-04-4P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
 (preparation, amination, and cytotoxic activity of)
 RN 123531-03-3 CAPLUS
 CN 7H-Indolo[3,2-c]quinoline-7,10(11H)-dione, 8-methoxy- (9CI) (CA INDEX NAME)

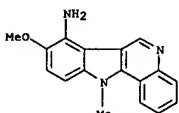
L7 ANSWER 127 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



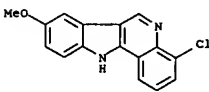
RN 123530-99-4 CAPLUS
 CN 1H-Indolo[3,2-c]quinolin-7-amine, 8-methoxy- (9CI) (CA INDEX NAME)



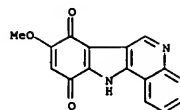
RN 123531-00-0 CAPLUS
 CN 1H-Indolo[3,2-c]quinolin-7-amine, 8-methoxy-11-methyl- (9CI) (CA INDEX NAME)



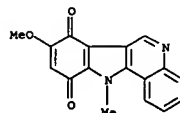
IT 123530-86-9P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation, N-methylation, or nitration of)
 RN 123530-86-9 CAPLUS
 CN 11H-Indolo[3,2-c]quinoline, 4-chloro-8-methoxy- (9CI) (CA INDEX NAME)



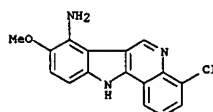
L7 ANSWER 127 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



RN 123531-04-4 CAPLUS
 CN 7H-Indolo[3,2-c]quinoline-7,10(11H)-dione, 8-methoxy-11-methyl- (9CI)
 (CA INDEX NAME)



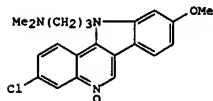
IT 123530-97-2P 123530-98-3P 123530-99-4P
 123531-00-0P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
 (preparation, oxidation, and cytotoxic activity of)
 RN 123530-97-2 CAPLUS
 CN 1H-Indolo[3,2-c]quinolin-7-amine, 4-chloro-8-methoxy- (9CI) (CA INDEX NAME)



RN 123530-98-3 CAPLUS
 CN 1H-Indolo[3,2-c]quinolin-7-amine, 4-chloro-8-methoxy-11-methyl- (9CI)
 (CA INDEX NAME)

L7 ANSWER 128 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN

AN 1989:586951 CAPLUS
 DN 111:186951
 TI The chemotherapy of rodent malaria XLIV. Studies on the mode of action of CM 6606, an indolo[3,2-c]quinoline N-oxide
 AU Peters, W.; Robinson, B. L.; Mutambu, S. L.; Warhurst, D. C.; Ellis, D. S.; Tovey, D. G.
 CS Dep. Med. Protozool., London Sch. Hyg. Trop., London, WC1E 7HT, UK
 SO Annals of Tropical Medicine & Parasitology (1989), 83(1), 1-10
 CODEN: ATMPA2; ISSN: 0003-4983
 DT Journal
 LA English
 GI



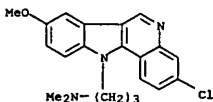
AB CM 6606 (I) differs in its mode of action from chloroquine but studies on its activity against parasites resistant to other antimalarials suggest that it may have some features in common with aminoalcs. Similarities in drug-induced pigment changes are especially striking. Only halofantrine shows a

reduced activity against parasites that are highly resistant to CM 6606, while such parasites are slightly hypersensitive to sulfadoxine and clindamycin. Evidence suggesting that CM 6606 may function through an active metabolite, possibly CM 6609, in which the N-oxide is reduced, is discussed.

IT 65287-64-1, CM 6609
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES

(Uses)
 (antimalarial activity of, as indoloquinoline oxide metabolite)

RN 65287-64-1 CAPLUS
 CN 11H-Indolo[3,2-c]quinoline-11-propanamine, 3-chloro-8-methoxy-N,N-dimethyl- (9CI) (CA INDEX NAME)

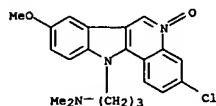


IT 65352-97-8, CM 6606
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES

L7 ANSWER 128 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)
study, unclassified); THU (Therapeutic use); BIOL (Biological study);
USES

(Uses)

RN 65352-97-8 CAPLUS
CN 11H-Indolo[3,2-c]quinoline-11-propanamine,
3-chloro-8-methoxy-N,N-dimethyl-
5-oxide (9CI) (CA INDEX NAME)



L7 ANSWER 129 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN
AN 1989:534125 CAPLUS
DN 111:134125
TI 1-Phenyl-2,3-dihydropyrrolo or -pyridino [3,2-c]quinoline derivatives,
process for their preparation, and antiulcer agents containing them
IN Ife, Robert John; Brown, Thomas Henry; Leach, Colin Andrew
PA SmithKline Beckman Corp., Neth.
SO Eur. Pat. Appl., 37 pp.
CODEN: EPXXDW

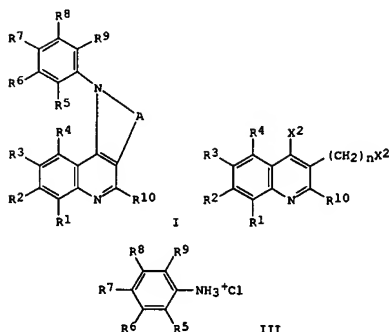
DT Patent

LA English

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI EP 307078	A1	19890315	EP 1988-306583	19880719
<-- EP 307078	B1	19920826		
R: AT, BE, CH, DE, ES, FR, GB, GR, IT, LI, LU, NL, SE	E	19920915	AT 1988-306583	19880719
AT 79880				
<-- AU 8819200	A1	19890127	AU 1988-19200	19880720
<-- JP 01040482	A2	19890210	JP 1988-184463	19880721
<-- ZA 8805311	A	19890726	ZA 1988-5311	19880721
<-- DK 8804144	A	19890125	DK 1988-4144	19880722
<-- US 5051508	A	19910924	US 1990-540394	19900619
PRAI GB 1987-17644	A	19870724		
US 1988-218757	B1	19880713		
EP 1988-306583	A	19880719		
OS MARPAT 111:134125				
GI				

L7 ANSWER 129 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



AB The title compds. [I; R1-R4 = H, C1-4 alkyl, C1-6 alkoxy, Ph, C1-6 alkylthio, C1-4 alkanoyl, NH2, (di)C1-6 alkylamino, halo, CF3, NO2, provided that ≥ 2 of R2-R4 = H; R5-R9 = H, C1-6 alkyl, alkoxy, or alkylthio, halo, cyano NH2, HO, CONH2, CO2H, C1-6 alkanoyl, CF3, NO2, provided that ≥ 2 of R5-R9 = H; R10 = H, C1-6 alkyl, alkoxy, or alkylthio, halo, HO, CH2OH, NHCH2)NOH, NR11R12; n = 0-4; R11, R12 = H, C1-6 alkyl; or NR11R12 forming (un)saturated ring] which are potent inhibitors of H⁺K⁺ ATPase enzyme, are prepared, e.g. by cyclocondensation of quinolines

(II; X1, X2 = leaving group; n = 2, 3) with anilines (III).

2-Methyl-3-(2-chloroethyl)-4-chloro-8-methoxyquinoline and 2-MeOC6H4NH2 = HCl in BuOH was refluxed 6 h to give 1-(2-methoxyphenyl)-4-methyl-6-methoxy-2,3-dihydropyrrolo[3,2-c]quinoline. Twenty-three I inhibited

H⁺K⁺ ATPase activity with IC50 values in the range of 0.17-33 μ M.

IT 122456-60-4P

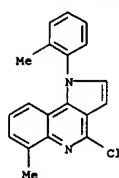
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation and amination of, by aminopropanol)

RN 122456-60-4 CAPLUS

CN 1H-Pyrrolo[3,2-c]quinoline, 4-chloro-6-methyl-1-(2-methylphenyl)- (9CI) (CA INDEX NAME)

L7 ANSWER 129 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



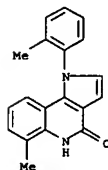
IT 122456-59-1P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation and chlorination of)

RN 122456-59-1 CAPLUS

CN 4H-Pyrrolo[3,2-c]quinolin-4-one, 1,5-dihydro-6-methyl-1-(2-methylphenyl)- (9CI) (CA INDEX NAME)



IT 122456-27-3P 122456-41-1P 122456-42-2P

122456-43-3P 122456-48-8P

RL: BAC (Biological activity or effector, except adverse); BSU

(Biological

study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use);

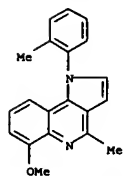
BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of, as antiulcer agent)

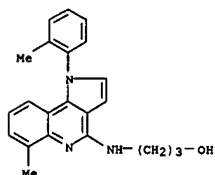
RN 122456-27-3 CAPLUS

CN 1H-Pyrrolo[3,2-c]quinoline, 6-methoxy-4-methyl-1-(2-methylphenyl)- (9CI) (CA INDEX NAME)

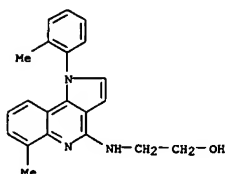
L7 ANSWER 129 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



RN 122456-41-1 CAPLUS
 CN 1-Propanol, 3-[[6-methyl-1-(2-methylphenyl)-1H-pyrrolo[3,2-c]quinolin-4-yl]amino]- (9CI) (CA INDEX NAME)

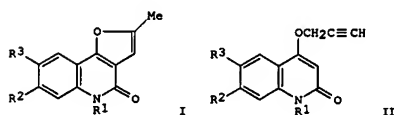


RN 122456-42-2 CAPLUS
 CN Ethanol, 2-[[6-methyl-1-(2-methylphenyl)-1H-pyrrolo[3,2-c]quinolin-4-yl]amino]- (9CI) (CA INDEX NAME)



RN 122456-43-3 CAPLUS
 CN 1H-Pyrrolo[3,2-c]quinolin-4-amine, N,6-dimethyl-1-(2-methylphenyl)- (9CI) (CA INDEX NAME)

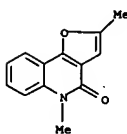
L7 ANSWER 130 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 1989:457574 CAPLUS
 DN 111:57574
 TI A facile synthesis of 2-methyl-4-oxo-4,5-dihydrofuro[3,2-c]quinolines
 AU Rao, V. Sudhakar; Darbarwar, Malleshwar
 CS Dep. Chem., Osmania Univ., Hyderabad, 500 007, India
 SO Synthesis (1989), (2), 139-41
 CODEN: SYNTBF; ISSN: 0039-7881
 DT Journal
 LA English
 OS CASREACT 111:57574
 GI



AB Furoquinolines I (R1 = Me, Ph; R2 = H, NO2; R3 = H, Br) were prepared 4-Hydroxy-2-(1H)-quinolinones were alkynylated to give 3,3-dipropargyl derivs., O,3-dipropargyl derivs., and ethers II; II were treated with NaHCO3 to give I.

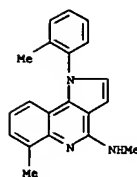
IT 121673-72-1P 121673-73-2P 121673-74-3P 121673-75-4P
 RI: SPN (Synthetic preparation); PREP (Preparation) (preparation of)

RN 121673-72-1 CAPLUS
 CN Furo[3,2-c]quinolin-4(5H)-one, 2,5-dimethyl- (9CI) (CA INDEX NAME)

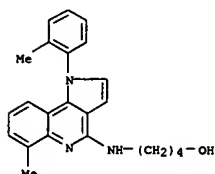


RN 121673-73-2 CAPLUS
 CN Furo[3,2-c]quinolin-4(5H)-one, 2,5-dimethyl-7-nitro- (9CI) (CA INDEX NAME)

L7 ANSWER 129 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

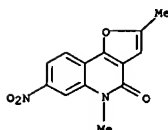


RN 122456-48-8 CAPLUS
 CN 1-Butanol, 4-[[6-methyl-1-(2-methylphenyl)-1H-pyrrolo[3,2-c]quinolin-4-yl]amino]-, monohydrochloride (9CI) (CA INDEX NAME)

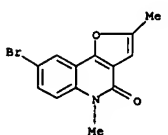


● HCl

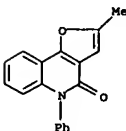
L7 ANSWER 130 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



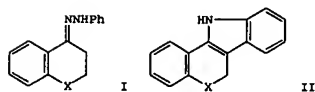
RN 121673-74-3 CAPLUS
 CN Furo[3,2-c]quinolin-4(5H)-one, 8-bromo-2,5-dimethyl- (9CI) (CA INDEX NAME)



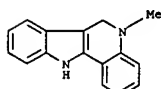
RN 121673-75-4 CAPLUS
 CN Furo[3,2-c]quinolin-4(5H)-one, 2-methyl-5-phenyl- (9CI) (CA INDEX NAME)



L7 ANSWER 131 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 1989:407173 CAPLUS
 DN 111:7173
 TI Synthesis of indole derivatives
 AU Kidwai, M. M.; Ahluwalia, V. K.
 CS Kirori Mal Coll., Univ. Delhi, Delhi, 110 007, India
 SO Indian Journal of Chemistry, Section B: Organic Chemistry Including Medicinal Chemistry (1988), 27B(10), 962
 CODEN: IJSBDB; ISSN: 0376-4699
 DT Journal
 LA English
 OS CASREACT 111:7173
 GI

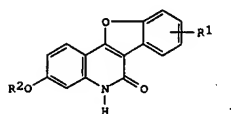


AB A one-step synthesis of indole derivs. in good yield through indolization of phenylhydrazones of cyclic keto compds. using formic acid is reported. Thus, refluxing phenylhydrazones I (X = S, NMe) in formic acid gave indole derivs. II (X = S, NMe) in 78% and 74% resp.
 IT 121113-05-1P
 RL: SPN (Synthetic preparation); PREP (Preparation) (preparation of)
 RN 121113-05-1 CAPLUS
 CN 5H-Indolo[3,2-c]quinoline, 6,11-dihydro-5-methyl- (9CI) (CA INDEX NAME)



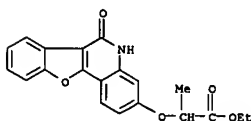
L7 ANSWER 132 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 1989:114818 CAPLUS
 DN 110:114818
 TI Preparation of bone resorption-inhibiting benzofuro[3,2-c]quinolinone for treatment of osteoporosis
 IN Kinoshita, Yukihiko; Ikeguchi, Seichi; Tsutsumi, Naoyuki; Ajisawa, Yukiyo; Ujii, Arai
 PA Kissei Pharmaceutical Co., Ltd., Japan
 SO Eur. Pat. Appl., 20 pp.
 CODEN: EPOXDW
 DT Patent
 LA English
 OS
 GI

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI EP 293146	A1	19881130	EP 1988-304631	19880523
<--				
R: AT, BE, CH, DE, ES, FR, GB, IT, LI, NL, SE				
JP 63295581	A2	19881201	JP 1987-128672	19870526
<--				
JP 07096552	B4	19951018		
JP 63295582	A2	19881201	JP 1987-128673	19870526
<--				
JP 07045404	B4	19950517		
JP 63297325	A2	19881205	JP 1987-132946	19870528
<--				
JP 06084303	B4	19941026		
NO 8802256	A	19881128	NO 1988-2256	19880524
<--				
DK 8802843	A	19881127	DK 1988-2843	19880525
<--				
FI 8802465	A	19881127	FI 1988-2465	19880525
<--				
AU 8816670	A1	19881201	AU 1988-16670	19880526
<--				
AU 615907	B2	19911017		
JP 1987-128672	A	19870526		
JP 1987-128673	A	19870526		
JP 1987-132946	A	19870528		
OS HARPAT 110:114818				
GI				

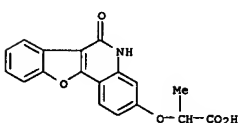


AB Title compds. I [R' = H, HO (un)substituted (un)branched C1-10 alkoxy; R2 = H, HO, (un)substituted (un)branched C1-10 alkyl] or its pharmaceutically

L7 ANSWER 132 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)
 acceptable salts, which are useful for the treatment of osteoporosis, are prepd. m-Anisidine was treated with di-Et 2,4-dimethoxyphenylmalonate at 270-290° for 2.5 h, and the intermediate and pyridine hydrochloride heated under reflux for 2.5-3 h at 220-250°, producing I (R1 = 9-OH; R2 = H) (II). Tablets for the treatment of osteoporosis were prepd. by mixing 700 ml of a 5% aq. hydroxypropylcellulose soln. with II 100, lactose 95, and corn starch 40 g. The dried mixt. was mixed with 8 g Ca CM-cellulose and 7 g Ca stearate, and this formulation pressed into 1000 tablets. Rats (3 wk old) were raised on low-Ca diets and treated with II at 300 mg/kg daily for 2 wk. At the end of this period, these rats had 8.1 ± 0.50 mg Ca and 5.1 ± 0.26 mg P/femur, compared to 4.2 ± 0.62 mg Ca and 3.2 ± 0.35 mg P/femur for untreated controls.
 IT 119376-05-5P 119376-06-6P
 RL: PREP (Preparation) (manufacture of, as drug for treatment for osteoporosis)
 RN 119376-05-5 CAPLUS
 CN Propanoic acid, 2-[(5,6-dihydro-6-oxobenzofuro[3,2-c]quinolin-3-yl)oxy]-, ethyl ester (9CI) (CA INDEX NAME)

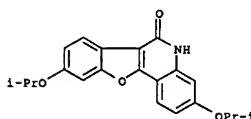


RN 119376-06-6 CAPLUS
 CN Propanoic acid, 2-[(5,6-dihydro-6-oxobenzofuro[3,2-c]quinolin-3-yl)oxy]- (9CI) (CA INDEX NAME)

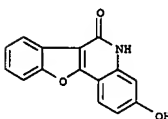


IT 119376-07-7P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent) (preparation and hydrolysis of)
 RN 119376-07-7 CAPLUS
 CN Benzofuro[3,2-c]quinolin-6(5H)-one, 3,9-bis(1-methylethoxy)- (9CI) (CA INDEX NAME)

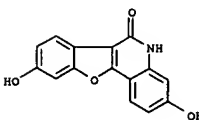
L7 ANSWER 132 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



IT 119376-03-3P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent) (preparation and reaction of, in preparation of antiosteoporosis drugs)
 RN 119376-03-3 CAPLUS
 CN Benzofuro[3,2-c]quinolin-6(5H)-one, 3-hydroxy- (9CI) (CA INDEX NAME)

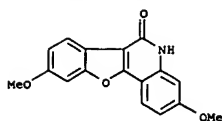


IT 92741-84-9P 92741-86-1P 119376-00-0P
 119376-01-1P 119376-02-2P 119376-04-4P
 119376-08-8P 119376-09-9P
 RL: SPN (Synthetic preparation); PREP (Preparation) (preparation of, for treatment of osteoporosis)
 RN 92741-84-9 CAPLUS
 CN Benzofuro[3,2-c]quinolin-6(5H)-one, 3,9-dihydroxy- (9CI) (CA INDEX NAME)

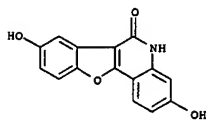


RN 92741-86-1 CAPLUS
 CN Benzofuro[3,2-c]quinolin-6(5H)-one, 3,9-dimethoxy- (9CI) (CA INDEX NAME)

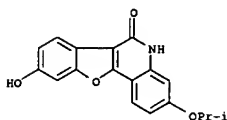
L7 ANSWER 132 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



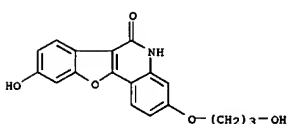
RN 119376-00-0 CAPLUS
CN Benzofuro[3,2-c]quinolin-6(5H)-one, 3,8-dihydroxy- (9CI) (CA INDEX NAME)



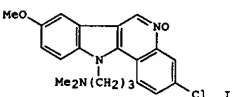
RN 119376-01-1 CAPLUS
CN Benzofuro[3,2-c]quinolin-6(5H)-one, 9-hydroxy-3-(1-methylethoxy)- (9CI) (CA INDEX NAME)



RN 119376-02-2 CAPLUS
CN Benzofuro[3,2-c]quinolin-6(5H)-one, 9-hydroxy-3-(3-hydroxypropoxy)- (9CI) (CA INDEX NAME)



L7 ANSWER 133 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN
AN 1989:50723 CAPLUS
DN 110:50723
TI The chemotherapy of rodent malaria. XLIII. Indolo[3,2-c]quinoline-N-oxides
AU Peters, W.; Robinson, B. L.
CS Dep. Med. Protozool., London Sch. Hyg. Trop. Med., London, WC1E 7HT, UK
SO Annals of Tropical Medicine & Parasitology (1988), 82(5), 423-7
CODEN: ATMPA2; ISSN: 0003-4983
DT Journal
LA English
GI



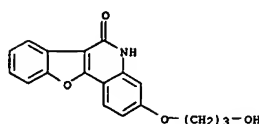
AB A number of novel indolo [3,2-c] quinoline-N-oxides possessed antimalarial activity. One of the series, compound CM 6606 (I) has a superior blood schizontocidal action against drug-sensitive Plasmodium berghei in the mouse than did chloroquine, although it is not fully active against strains highly resistant to chloroquine or mefloquine. It also shows some tissue schizontocidal (causal prophylactic) and gametocytocidal action in mice infected with P. yoelii nigeriensis. The structure activity of this chemical series and the possibility that CM 6606 functions through an active metabolite are discussed.

IT 239-09-8D, 11H-Indolo[3,2-c]quinoline, derivs. 65287-52-7, CM 6245 65287-54-9, CM 6249 65287-55-0, CM 6508 65287-57-2, CM 6507 65287-67-4, CM 7067 65352-97-8, CM 6606 118448-38-7, SR 42243 118448-39-8, CM 6606A 118448-40-1, SR 24811B 118448-41-2, SR 25149A 118448-42-3, SR 25252A 118448-43-4, CM 6609A 118448-44-5, SR 25596A 118448-45-6, SR 25604A 118448-46-7, SR 42339A 118448-47-8, SR 42339 118448-48-9, SR 25211A 118448-49-0, SR 42165

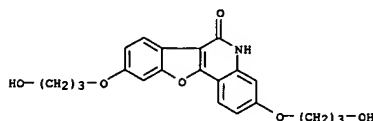
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses) (antimalarial activity of, structure in relation to)

RN 239-09-8 CAPLUS
CN 11H-Indolo[3,2-c]quinoline (6CI, 7CI, 8CI, 9CI) (CA INDEX NAME)

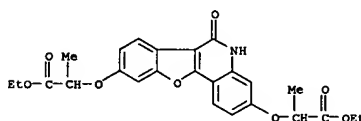
L7 ANSWER 132 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)
RN 119376-04-4 CAPLUS
CN Benzofuro[3,2-c]quinolin-6(5H)-one, 3-(3-hydroxypropoxy)- (9CI) (CA INDEX NAME)



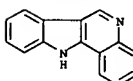
RN 119376-08-8 CAPLUS
CN Benzofuro[3,2-c]quinolin-6(5H)-one, 3,9-bis(3-hydroxypropoxy)- (9CI) (CA INDEX NAME)



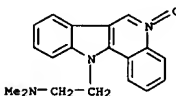
RN 119376-09-9 CAPLUS
CN Propanoic acid, 2,2'-[5,6-dihydro-6-oxobenzofuro[3,2-c]quinoline-3,9-diyl]bis(oxy)]bis-, diethyl ester (9CI) (CA INDEX NAME)



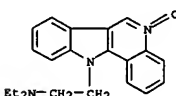
L7 ANSWER 133 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



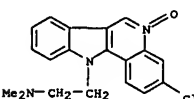
RN 65287-52-7 CAPLUS
CN 11H-Indolo[3,2-c]quinoline-11-ethanamine, N,N-dimethyl-, 5-oxide (9CI) (CA INDEX NAME)



RN 65287-54-9 CAPLUS
CN 11H-Indolo[3,2-c]quinoline-11-ethanamine, N,N-diethyl-, 5-oxide (9CI) (CA INDEX NAME)

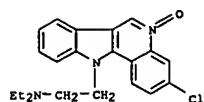


RN 65287-55-0 CAPLUS
CN 11H-Indolo[3,2-c]quinoline-11-ethanamine, 3-chloro-N,N-dimethyl-, 5-oxide (9CI) (CA INDEX NAME)

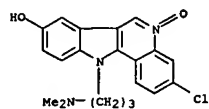


RN 65287-57-2 CAPLUS
CN 11H-Indolo[3,2-c]quinoline-11-ethanamine, 3-chloro-N,N-diethyl-, 5-oxide (9CI) (CA INDEX NAME)

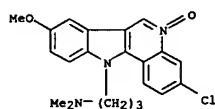
L7 ANSWER 133 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



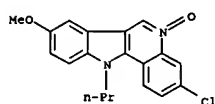
RN 65287-67-4 CAPLUS
CN 11H-Indolo[3,2-c]quinolin-8-ol, 3-chloro-11-[(3-(dimethylamino)propyl)-, 5-oxide (9CI) (CA INDEX NAME)



RN 65352-97-8 CAPLUS
CN 11H-Indolo[3,2-c]quinoline-11-propanamine, 3-chloro-8-methoxy-N,N-dimethyl-, 5-oxide (9CI) (CA INDEX NAME)

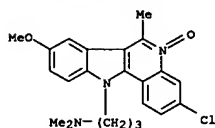


RN 118448-38-7 CAPLUS
CN 11H-Indolo[3,2-c]quinoline, 3-chloro-8-methoxy-11-propyl-, 5-oxide (9CI) (CA INDEX NAME)



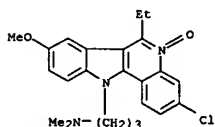
RN 118448-39-8 CAPLUS
CN 11H-Indolo[3,2-c]quinoline-11-propanamine, 3-chloro-8-methoxy-N,N-dimethyl-

L7 ANSWER 133 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



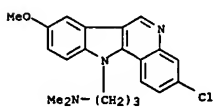
● HCl

RN 118448-42-3 CAPLUS
CN 11H-Indolo[3,2-c]quinoline-11-propanamine, 3-chloro-6-ethyl-8-methoxy-N,N-dimethyl-, 5-oxide, monohydrochloride (9CI) (CA INDEX NAME)



● HCl

RN 118448-43-4 CAPLUS
CN 11H-Indolo[3,2-c]quinoline-11-propanamine, 3-chloro-8-methoxy-N,N-dimethyl-, monohydrochloride (9CI) (CA INDEX NAME)



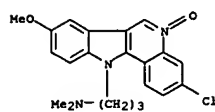
● HCl

RN 118448-44-5 CAPLUS
CN 1-Propanamine, 3-[(3-chloro-6-methyl-5-oxido-11-[2-(1-piperidinyl)ethyl]-11H-indolo[3,2-c]quinolin-8-yl)oxy]-N,N-dimethyl-, monohydrochloride (9CI) (CA INDEX NAME)

L7 ANSWER 133 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

CM 1

CRN 65352-97-8
CMF C21 H22 Cl N3 O2

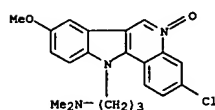


CM 2

CRN 75-75-2
CMF C H4 O3 S



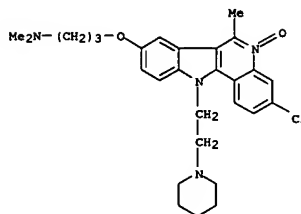
RN 118448-40-1 CAPLUS
CN 11H-Indolo[3,2-c]quinoline-11-propanamine, 3-chloro-8-methoxy-N,N-dimethyl-, 5-oxide, monohydrochloride (9CI) (CA INDEX NAME)



● HCl

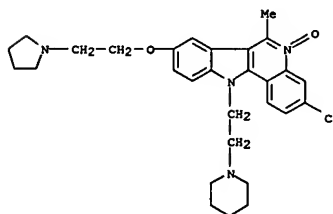
RN 118448-41-2 CAPLUS
CN 11H-Indolo[3,2-c]quinoline-11-propanamine, 3-chloro-8-methoxy-N,N,6-trimethyl-, 5-oxide, monohydrochloride (9CI) (CA INDEX NAME)

L7 ANSWER 133 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



● HCl

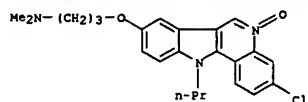
RN 118448-45-6 CAPLUS
CN 11H-Indolo[3,2-c]quinoline, 3-chloro-6-methyl-11-[2-(1-piperidinyl)ethyl]-8-[2-(1-pyrrolidinyl)ethoxy]-, 5-oxide, monohydrochloride (9CI) (CA INDEX NAME)



● HCl

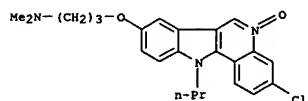
RN 118448-46-7 CAPLUS
CN 1-Propanamine, 3-[(3-chloro-5-oxido-11-propyl-11H-indolo[3,2-c]quinolin-8-yl)oxy]-N,N-dimethyl-, monohydrochloride (9CI) (CA INDEX NAME)

L7 ANSWER 133 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

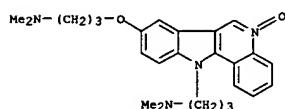


● HCl

RN 118448-47-8 CAPLUS
 CN 1-Propanamine,
 3-((3-chloro-5-oxido-11-propyl-11H-indolo[3,2-c]quinolin-8-yl)oxy)-N,N-dimethyl- (9CI) (CA INDEX NAME)



RN 118448-48-9 CAPLUS
 CN 11H-Indolo[3,2-c]quinoline-11-propanamine, 8-((3-(dimethylamino)propoxy)-N,N-dimethyl-, 5-oxide, monohydrochloride (9CI) (CA INDEX NAME)



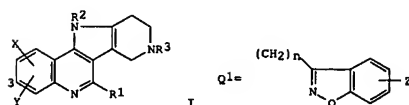
● HCl

RN 118448-49-0 CAPLUS
 CN 11H-Indolo[3,2-c]quinoline-11-propanamine, 3-chloro-8-((3-(dimethylamino)propoxy)-N,N-dimethyl- (9CI) (CA INDEX NAME)

L7 ANSWER 134 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN

RN 1989:38974 CAPLUS
 DN 110:38974
 TI Preparation and testing of tetrahydropyrrolo[3',4':4,5]pyrrolo[3,2-c]quinolines as hypotensive agents
 IN Schonafinger, Karl; Ong, Helen Hu
 PA Hoechst-Roussel Pharmaceuticals, Inc., USA
 SO Eur. Pat. Appl., 15 pp.
 CODEN: EPKXDW
 DT Patent
 LA English
 FAN.CMT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI EP 277625	A2	19880810	EP 1988-101426	19880202
<-- EP 277625	A3	19900711		
R: AT, BE, CH, DE, ES, FR, GB, GR, IT, LI, LU, NL, SE				
US 4771052	A	19880913	US 1987-12715	19870205
<-- DK 8800568	A	19880806	DK 1988-568	19880204
<-- JP 63196584	A2	19880815	JP 1988-22968	19880204
<-- US 4880818	A	19891114	US 1988-218749	19880712
PRAI US 1987-12715	A	19870205		
OS CASREACT 110:38974; MARPAT 110:38974				
GI				



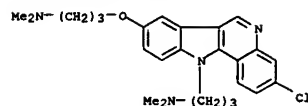
AB The title compds. (I; R1 = H, alkyl; R2 = H, alkoxy, alkanoyl, aroyl; R3 = H, alkyl, aralkyl, benzisoxazylalkyl Q1; X, Y = H, alkyl, alkoxy, OH, halo, CF3, NO2; Z = H, alkyl, alkoxy, OH, halo; n = 1-6), useful as antihypertensives, were prepared. A mixture of 7-chloro-4-(1-methylhydrazino)quinoline-HCl, 1-acetyl-4-piperidinone, and Na2CO3 was refluxed 30 min to give the Schiff base which was heated at 180° in diethylene glycol to give I (R1 = Y = H, R2 = Me, R3 = Ac, X = 3-Cl).

(II). In hypertensive rats 10 mg II/kg orally reduced blood pressure 61 mmHg.
 IT 117767-07-4P 117767-08-5P 117767-10-9P
 117767-11-0P 117767-12-1P 117767-13-2P
 117767-14-3P 118287-78-9P

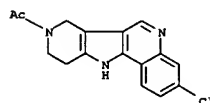
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (preparation of, as antihypertensive)

RN 117767-07-4 CAPLUS
 CN 7H-Pyrrolo[3',4':4,5]pyrrolo[3,2-c]quinoline, 8-acetyl-3-chloro-8,9,10,11-

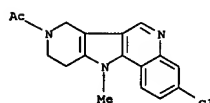
L7 ANSWER 133 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



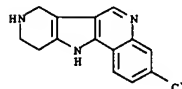
L7 ANSWER 134 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



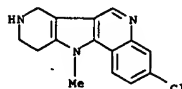
RN 117767-08-5 CAPLUS
 CN 7H-Pyrrolo[3',4':4,5]pyrrolo[3,2-c]quinoline, 8-acetyl-3-chloro-8,9,10,11-tetrahydro-11-methyl- (9CI) (CA INDEX NAME)



RN 117767-10-9 CAPLUS
 CN 7H-Pyrrolo[3',4':4,5]pyrrolo[3,2-c]quinoline, 3-chloro-8,9,10,11-tetrahydro-11-methyl- (9CI) (CA INDEX NAME)

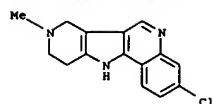


RN 117767-11-0 CAPLUS
 CN 7H-Pyrrolo[3',4':4,5]pyrrolo[3,2-c]quinoline, 3-chloro-8,9,10,11-tetrahydro-11-methyl- (9CI) (CA INDEX NAME)

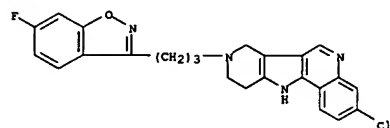


RN 117767-12-1 CAPLUS
 CN 7H-Pyrrolo[3',4':4,5]pyrrolo[3,2-c]quinoline, 3-chloro-8,9,10,11-tetrahydro-8-methyl- (9CI) (CA INDEX NAME)

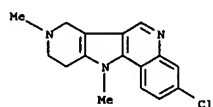
L7 ANSWER 134 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



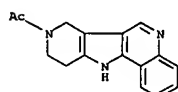
RN 117767-13-2 CAPLUS
 CN 7H-Pyrido[3',4':4,5]pyrrolo[3,2-c]quinoline, 3-chloro-8-[3-(6-fluoro-1,2-benzisoxazol-3-yl)propyl]-8,9,10,11-tetrahydro- (9CI) (CA INDEX NAME)



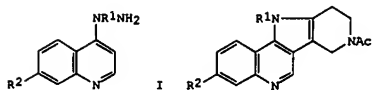
RN 117767-14-3 CAPLUS
 CN 7H-Pyrido[3',4':4,5]pyrrolo[3,2-c]quinoline, 3-chloro-8,9,10,11-tetrahydro-8,11-dimethyl- (9CI) (CA INDEX NAME)



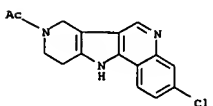
RN 118287-79-9 CAPLUS
 CN 7H-Pyrido[3',4':4,5]pyrrolo[3,2-c]quinoline, 8-acetyl-8,9,10,11-tetrahydro- (9CI) (CA INDEX NAME)



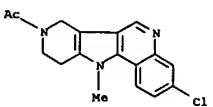
L7 ANSWER 135 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN
 RN 1988:630840 CAPLUS
 DN 109:230840
 TI Synthesis of 7,8,9,10-tetrahydropyrido[3',4':4,5]pyrrolo[3,2-c]quinolines
 AU Schonafinger, Karl; Yasenchak, Christine M.; Vollman, Anne; Ong, Helen H.
 CS Chem. Res. Dep., Hoechst-Roussel Pharm. Inc., Sommerville, NJ, 08876, USA
 SO Journal of Heterocyclic Chemistry (1988), 25(2), 535-7
 CODEN: JHTCAD; ISSN: 0022-152X
 DT Journal
 LA English
 OS CASREACT 109:230840
 GI



AB 4-Chloroquinolines reacted with hydrazines to give hydrazino-substituted compds. I (R1 = H, Me; R2 = H, Cl). I were treated with 1-acetyl-1,4-dihydropyridin-4-one to give pyridopyrroloquinolines II.
 IT 117767-07-4P 117767-08-5P 117767-09-6P 117767-10-9P 117767-11-0P 117767-12-1P 117767-13-2P 117767-14-3P
 RL: SPN (Synthetic preparation); PREP (Preparation) (preparation of)
 RN 117767-07-4 CAPLUS
 CN 7H-Pyrido[3',4':4,5]pyrrolo[3,2-c]quinoline, 8-acetyl-3-chloro-8,9,10,11-tetrahydro- (9CI) (CA INDEX NAME)

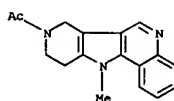


RN 117767-08-5 CAPLUS
 CN 7H-Pyrido[3',4':4,5]pyrrolo[3,2-c]quinoline, 8-acetyl-3-chloro-8,9,10,11-tetrahydro-11-methyl- (9CI) (CA INDEX NAME)

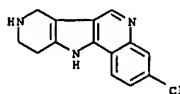


L7 ANSWER 134 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

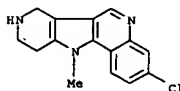
L7 ANSWER 135 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)
 RN 117767-09-6 CAPLUS
 CN 7H-Pyrido[3',4':4,5]pyrrolo[3,2-c]quinoline, 8-acetyl-8,9,10,11-tetrahydro-11-methyl- (9CI) (CA INDEX NAME)



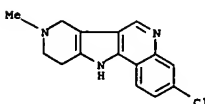
RN 117767-10-9 CAPLUS
 CN 7H-Pyrido[3',4':4,5]pyrrolo[3,2-c]quinoline, 3-chloro-8,9,10,11-tetrahydro- (9CI) (CA INDEX NAME)



RN 117767-11-0 CAPLUS
 CN 7H-Pyrido[3',4':4,5]pyrrolo[3,2-c]quinoline, 3-chloro-8,9,10,11-tetrahydro-11-methyl- (9CI) (CA INDEX NAME)

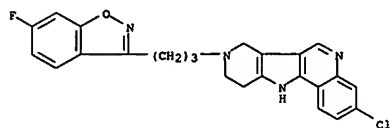


RN 117767-12-1 CAPLUS
 CN 7H-Pyrido[3',4':4,5]pyrrolo[3,2-c]quinoline, 3-chloro-8,9,10,11-tetrahydro-8-methyl- (9CI) (CA INDEX NAME)

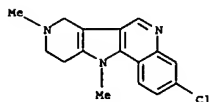


RN 117767-13-2 CAPLUS
 CN 7H-Pyrido[3',4':4,5]pyrrolo[3,2-c]quinoline, 3-chloro-8-[3-(6-fluoro-1,2-benzisoxazol-3-yl)propyl]-8,9,10,11-tetrahydro- (9CI) (CA INDEX NAME)

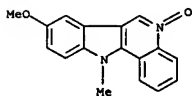
L7 ANSWER 135 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)
benzisoxazol-3-yl)propyl)-8,9,10,11-tetrahydro- (9CI) (CA INDEX NAME)



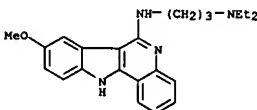
RN 117767-14-3 CAPLUS
CN 7H-Pyrido[3',4':4,5]pyrrolo[3,2-c]quinoline,
3-chloro-8,9,10,11-tetrahydro-
8,11-dimethyl- (9CI) (CA INDEX NAME)



L7 ANSWER 136 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)
CN 11H-Indolo[3,2-c]quinoline, 8-methoxy-11-methyl-, 5-oxide (9CI) (CA INDEX NAME)



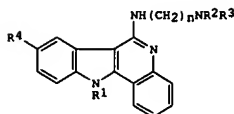
IT 114913-96-1P 114932-22-8P 116618-21-4P
116618-22-5P 116618-23-6P 116618-24-7P
116618-25-8P 116618-26-9P 116618-27-0P
116618-28-1P 116618-29-2P 116618-30-5P
116618-31-6P 116618-32-7P 116618-33-8P
116618-34-9P 116618-35-0P 116618-36-1P
116618-37-2P 116618-38-3P 116618-39-4P
116618-40-7P 116618-41-8P 116618-42-9P
116618-43-0P 116618-44-1P 116618-45-2P
116618-46-3P 116618-47-4P 116618-48-5P
116618-49-6P 116618-50-9P
RL: BAC (Biological activity or effector, except adverse); BSU
(Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use);
BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of, as antitumor agent)
RN 114913-96-1 CAPLUS
CN 1,3-Propanediamine,
N,N-diethyl-N'-(8-methoxy-11H-indolo[3,2-c]quinolin-6-yl)-, dihydrochloride (9CI) (CA INDEX NAME)



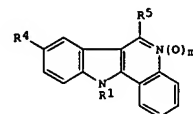
● 2 HCl

RN 114932-22-8 CAPLUS
CN 1,3-Propanediamine, N,N-diethyl-N'-(8-methoxy-11-methyl-11H-indolo[3,2-c]quinolin-6-yl)-, dihydrochloride (9CI) (CA INDEX NAME)

L7 ANSWER 136 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN
AN 1988:549505 CAPLUS
DN 109:149505
TI Indolo[3,2-c]quinoline derivatives, their preparation, their antitumor activity, and pharmaceutical compositions containing them
IN Brax, Jean Pierre; De Cointet, Paul; Pepin, Odile; Pierre, Alain
PA SANOFI, Fr.
SO Fr. Demande, 34 pp.
CODEN: FRXXBL
DT Patent
LA French
FAN.CNT 2
PATENT NO. KIND DATE APPLICATION NO. DATE
PI FR 2590898 A1 19870605 FR 1985-18209 19851202
FR 2590898 B1 19871211
EP 226508 A1 19870624 EP 1986-402676 19861202
R: AT, BE, CH, DE, ES, FR, GB, GR, IT, LI, LU, NL, SE
FRAI FR 1985-18209 A 19851202
FR 1985-18210 A 19851202
OS CASREACT 109:149505
GI



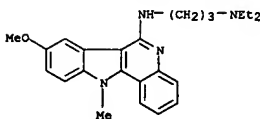
I



II

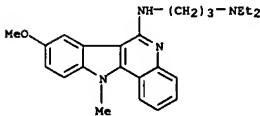
AB The title compds. [I; n = integer 2-4; R1 = H, alkyl; R2, R3 = H, alkyl, NR2R3 may form a ring; R4 = OH, alkoxy] and their pharmaceutically acceptable acid addition salts, useful as antitumor agents, are prepared from indoloquinoline oxides II (R1 = alkyl, 2-tetrahydropyranyl; R4 = alkoxy; R5 = H; m = 1). II (R1 = Me, R4 = OMe, m = O, R5 = Cl), obtained in many steps from p-MeOC6H4NHNH2 and MeOC6H4NO2-o via condensation, methylation, formylation, cyclization, etc., was heated with Et2N(CH2)3NH2 at 180° for 3.5 h to give 70% I (R1 = Me, R2 = R3 = Et, R4 = MeO, n = 3) (III). The ID50 (50% inhibition concns.) of 16 tested I on the culture of mouse leukemia L 1210 tumor cells ranged from 0.04-2.6 μmol/L. A suppository containing 0.250 g III in semi-synthetic triglycerides was prepared
IT 116618-53-2P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and chlorination of)
RN 116618-53-2 CAPLUS

L7 ANSWER 136 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

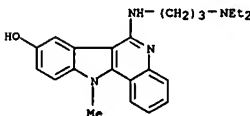


● 2 HCl

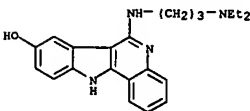
RN 116618-21-4 CAPLUS
CN 1,3-Propanediamine, N,N-diethyl-N'-(8-methoxy-11-methyl-11H-indolo[3,2-c]quinolin-6-yl)- (9CI) (CA INDEX NAME)



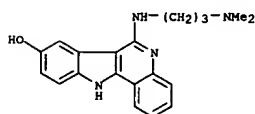
RN 116618-22-5 CAPLUS
CN 11H-Indolo[3,2-c]quinolin-8-ol, 6-[[3-(diethylamino)propyl]amino]-11-methyl- (9CI) (CA INDEX NAME)



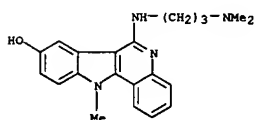
RN 116618-23-6 CAPLUS
CN 11H-Indolo[3,2-c]quinolin-8-ol, 6-[[3-(diethylamino)propyl]amino]- (9CI) (CA INDEX NAME)



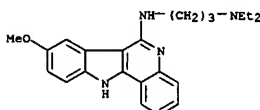
L7 ANSWER 136 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)
 RN 116618-24-7 CAPLUS
 CN 11H-Indolo[3,2-c]quinolin-8-ol, 6-[[3-(dimethylamino)propyl]amino]- (9CI)
 (CA INDEX NAME)



RN 116618-25-8 CAPLUS
 CN 11H-Indolo[3,2-c]quinolin-8-ol, 6-[[3-(dimethylamino)propyl]amino]-11-methyl- (9CI) (CA INDEX NAME)

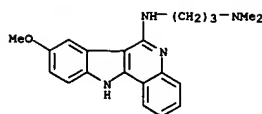


RN 116618-26-9 CAPLUS
 CN 1,3-Propanediamine, N'-(8-methoxy-11H-indolo[3,2-c]quinolin-6-yl)- (9CI) (CA INDEX NAME)

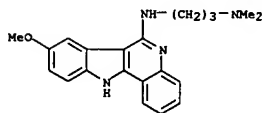


RN 116618-27-0 CAPLUS
 CN 1,3-Propanediamine, N'-(8-methoxy-11H-indolo[3,2-c]quinolin-6-yl)-N,N-dimethyl- (9CI) (CA INDEX NAME)

L7 ANSWER 136 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

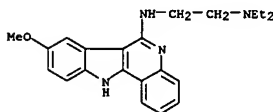


RN 116618-28-1 CAPLUS
 CN 1,3-Propanediamine, N'-(8-methoxy-11H-indolo[3,2-c]quinolin-6-yl)-N,N-dimethyl-, dihydrochloride (9CI) (CA INDEX NAME)



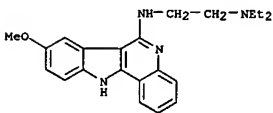
● 2 HCl

RN 116618-29-2 CAPLUS
 CN 1,2-Ethanediamine, N,N-diethyl-N'-(8-methoxy-11H-indolo[3,2-c]quinolin-6-yl)- (9CI) (CA INDEX NAME)



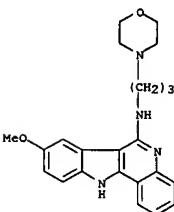
RN 116618-30-5 CAPLUS
 CN 1,2-Ethanediamine, N,N-diethyl-N'-(8-methoxy-11H-indolo[3,2-c]quinolin-6-yl)-, dihydrochloride (9CI) (CA INDEX NAME)

L7 ANSWER 136 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



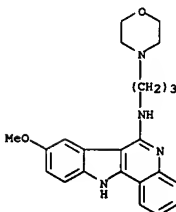
● 2 HCl

RN 116618-31-6 CAPLUS
 CN 11H-Indolo[3,2-c]quinolin-6-amine, 8-methoxy-N-[3-(4-morpholinyl)propyl]- (9CI) (CA INDEX NAME)



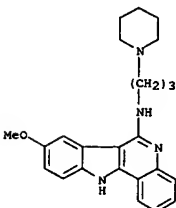
RN 116618-32-7 CAPLUS
 CN 11H-Indolo[3,2-c]quinolin-6-amine, 8-methoxy-N-[3-(4-morpholinyl)propyl]-, dihydrochloride (9CI) (CA INDEX NAME)

L7 ANSWER 136 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



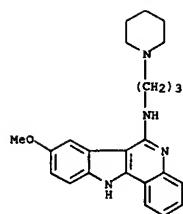
● 2 HCl

RN 116618-33-8 CAPLUS
 CN 11H-Indolo[3,2-c]quinolin-6-amine, 8-methoxy-N-[3-(1-piperidinyl)propyl]- (9CI) (CA INDEX NAME)



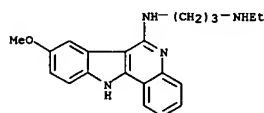
RN 116618-34-9 CAPLUS
 CN 11H-Indolo[3,2-c]quinolin-6-amine, 8-methoxy-N-[3-(1-piperidinyl)propyl]-, dihydrochloride (9CI) (CA INDEX NAME)

L7 ANSWER 136 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



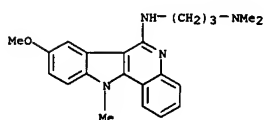
● 2 HCl

RN 116618-35-0 CAPLUS
 CN 1,3-Propanediamine,
 N-ethyl-N'-(8-methoxy-11H-indolo[3,2-c]quinolin-6-yl)-
 (9CI) (CA INDEX NAME)

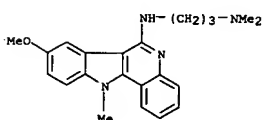


RN 116618-36-1 CAPLUS
 CN 1,3-Propanediamine,
 N-ethyl-N'-(8-methoxy-11H-indolo[3,2-c]quinolin-6-yl)-
 , dihydrochloride (9CI) (CA INDEX NAME)

L7 ANSWER 136 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

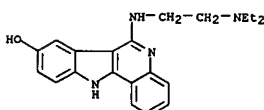


RN 116618-40-7 CAPLUS
 CN 1,3-Propanediamine, N'-(8-methoxy-11-methyl-11H-indolo[3,2-c]quinolin-6-yl)-N,N-dimethyl-, dihydrochloride (9CI) (CA INDEX NAME)



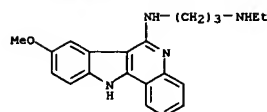
● 2 HCl

RN 116618-41-8 CAPLUS
 CN 11H-Indolo[3,2-c]quinolin-8-ol, 6-[[2-(diethylamino)ethyl]amino]- (9CI)
 (CA INDEX NAME)



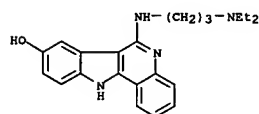
RN 116618-42-9 CAPLUS
 CN 11H-Indolo[3,2-c]quinolin-8-ol, 6-[[2-(diethylamino)ethyl]amino]-,
 dihydrochloride (9CI) (CA INDEX NAME)

L7 ANSWER 136 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



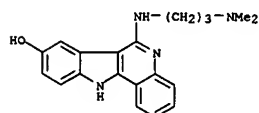
● 2 HCl

RN 116618-37-2 CAPLUS
 CN 11H-Indolo[3,2-c]quinolin-8-ol, 6-[[3-(diethylamino)propyl]amino]-,
 dihydrochloride (9CI) (CA INDEX NAME)



● 2 HCl

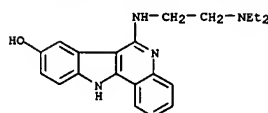
RN 116618-38-3 CAPLUS
 CN 11H-Indolo[3,2-c]quinolin-8-ol, 6-[[3-(dimethylamino)propyl]amino]-,
 dihydrochloride (9CI) (CA INDEX NAME)



● 2 HCl

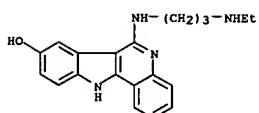
RN 116618-39-4 CAPLUS
 CN 1,3-Propanediamine, N'-(8-methoxy-11-methyl-11H-indolo[3,2-c]quinolin-6-yl)-N,N-dimethyl-, dihydrochloride (9CI) (CA INDEX NAME)

L7 ANSWER 136 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

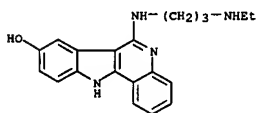


● 2 HCl

RN 116618-43-0 CAPLUS
 CN 11H-Indolo[3,2-c]quinolin-8-ol, 6-[[3-(ethylamino)propyl]amino]- (9CI)
 (CA INDEX NAME)



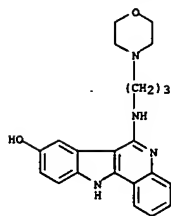
RN 116618-44-1 CAPLUS
 CN 11H-Indolo[3,2-c]quinolin-8-ol, 6-[[3-(ethylamino)propyl]amino]-,
 dihydrochloride (9CI) (CA INDEX NAME)



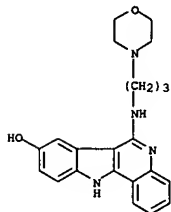
● 2 HCl

RN 116618-45-2 CAPLUS
 CN 11H-Indolo[3,2-c]quinolin-8-ol, 6-[[3-(4-morpholinyl)propyl]amino]- (9CI)
 (CA INDEX NAME)

L7 ANSWER 136 OF 273 CAPLUS COPYRIGHT 2005 ACS ON STN (Continued)



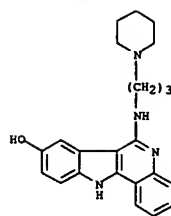
RN 116618-46-3 CAPLUS
 CN 11H-Indolo[3,2-c]quinolin-8-ol, 6-[[3-(4-morpholinyl)propyl]amino]-, dihydrochloride (9CI) (CA INDEX NAME)



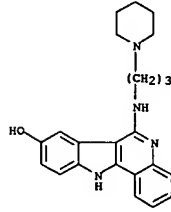
● 2 HCl

RN 116618-47-4 CAPLUS
 CN 11H-Indolo[3,2-c]quinolin-8-ol, 6-[[3-(1-piperidinyl)propyl]amino]- (9CI) (CA INDEX NAME)

L7 ANSWER 136 OF 273 CAPLUS COPYRIGHT 2005 ACS ON STN (Continued)



RN 116618-48-5 CAPLUS
 CN 11H-Indolo[3,2-c]quinolin-8-ol, 6-[[3-(1-piperidinyl)propyl]amino]-, dihydrochloride (9CI) (CA INDEX NAME)



● 2 HCl

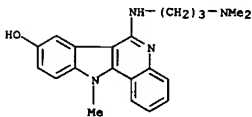
RN 116618-49-6 CAPLUS
 CN 11H-Indolo[3,2-c]quinolin-8-ol, 6-[[3-(diethylamino)propyl]amino]-11-methyl-, dihydrochloride (9CI) (CA INDEX NAME)

L7 ANSWER 136 OF 273 CAPLUS COPYRIGHT 2005 ACS ON STN (Continued)



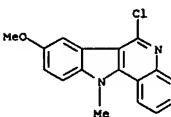
● 2 HCl

RN 116618-50-9 CAPLUS
 CN 11H-Indolo[3,2-c]quinolin-8-ol, 6-[[3-(dimethylamino)propyl]amino]-11-methyl-, dihydrochloride (9CI) (CA INDEX NAME)



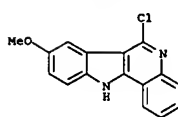
● 2 HCl

IT 114913-94-9P 114913-95-OP
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation of, as intermediate for antitumor agents)
 RN 114913-94-9 CAPLUS
 CN 11H-Indolo[3,2-c]quinoline, 6-chloro-8-methoxy-11-methyl- (9CI) (CA INDEX NAME)



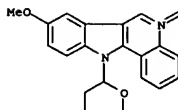
RN 114913-95-0 CAPLUS
 CN 11H-Indolo[3,2-c]quinoline, 6-chloro-8-methoxy- (9CI) (CA INDEX NAME)

L7 ANSWER 136 OF 273 CAPLUS COPYRIGHT 2005 ACS ON STN (Continued)

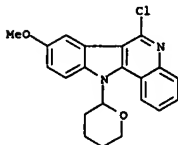


IT 116618-55-4P 116618-56-5P 116618-57-6P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation of, as intermediate for antitumor indoloquinoline derivs.)

RN 116618-55-4 CAPLUS
 CN 11H-Indolo[3,2-c]quinoline, 8-methoxy-11-(tetrahydro-2H-pyran-2-yl)-, 5-oxide (9CI) (CA INDEX NAME)

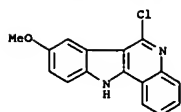


RN 116618-56-5 CAPLUS
 CN 11H-Indolo[3,2-c]quinoline, 6-chloro-8-methoxy-11-(tetrahydro-2H-pyran-2-yl)- (9CI) (CA INDEX NAME)



RN 116618-57-6 CAPLUS
 CN 11H-Indolo[3,2-c]quinoline, 6-chloro-8-methoxy-, monohydrochloride (9CI) (CA INDEX NAME)

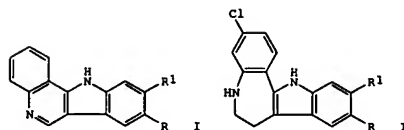
L7 ANSWER 136 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



● HCl

L7 ANSWER 137 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN

AN 1988:549388 CAPLUS
 DN 109:149388
 TI Synthesis of indolo[3,2-c]quinolines and indolo[3,2-d]benzazepines and their interaction with DNA
 AU Ibrahim, El Sayed; Montgomerie, Anita M.; Sneddon, Andrew H.; Proctor, George R.; Green, Brian
 CS Dep. Chem. Blochem., Univ. Strathclyde, Glasgow, G1 1XL, UK
 SO European Journal of Medicinal Chemistry (1988), 23(2), 193-8
 CODEN: EJMCA5; ISSN: 0223-5234
 DT Journal
 LA English
 OS CASREACT 109:149388
 GI



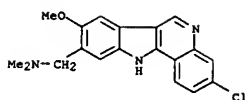
AB A number of indolo[3,2-c]quinolines, e.g. I (R = H, OMe; R1 = CH2NMe2, CH2Net2, H), and tetrahydroindolo[3,2-d]-1-benzazepines, e.g. II (R, R1 = same), were prepared by Fischer indolization of ketones, including 7-chloro-1,2,3,4-tetrahydroquinol-4-one and 8-chloro-2,3,4,5-tetrahydro-1-benzazepin-5-one, with several hydrazines. Some of the planar indolo[3,2-c]quinoline derivs. form intercalation complexes with DNA and inhibit the synthesis of macromols. in cultured KB cells. Non-planar tetrahydroindolo[3,2-d]-1-benzazepines did not form intercalation complexes with DNA under the same conditions. I (R = OMe, R1 = CH2Net2;

R = H, R1 = CH2NMe2) inhibited the synthesis of macromols. in cultured KB cells. I (R = OMe, R1 = CH2Net2) being the most effective. No significant anti-tumor activity was detected for I or II in the NIH screening program.

IT 116792-14-4P 116792-15-5P 116792-16-6P
 116792-17-7P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation and DNA binding activities of)

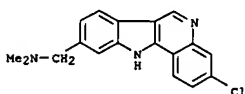
RN 116792-14-4 CAPLUS
 CN 11H-Indolo[3,2-c]quinoline-9-methanamine,
 3-chloro-8-methoxy-N,N-dimethyl-
 , dihydrochloride (9CI) (CA INDEX NAME)

L7 ANSWER 137 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



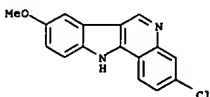
● 2 HCl

RN 116792-15-5 CAPLUS
 CN 11H-Indolo[3,2-c]quinoline-9-methanamine, 3-chloro-N,N-dimethyl-
 dihydrochloride (9CI) (CA INDEX NAME)



● 2 HCl

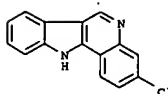
RN 116792-16-6 CAPLUS
 CN 11H-Indolo[3,2-c]quinoline, 3-chloro-8-methoxy-, monohydrochloride (9CI)
 (CA INDEX NAME)



● HCl

RN 116792-17-7 CAPLUS
 CN 11H-Indolo[3,2-c]quinoline, 3-chloro-, monohydrochloride (9CI) (CA INDEX NAME)

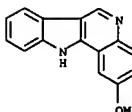
L7 ANSWER 137 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



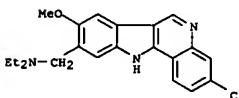
● HCl

IT 4295-45-8P 34374-22-6P 64398-24-9P
 116792-04-2P 116792-05-3P 116792-06-4P
 116792-07-5P 116815-04-4P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation and DNA binding activity of)

RN 4295-45-8 CAPLUS
 CN 11H-Indolo[3,2-c]quinoline, 2-methoxy- (7CI, 8CI, 9CI) (CA INDEX NAME)

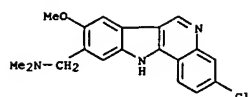


RN 34374-22-6 CAPLUS
 CN 11H-Indolo[3,2-c]quinoline-9-methanamine, 3-chloro-N,N-diethyl-8-methoxy-
 (9CI) (CA INDEX NAME)

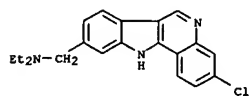


RN 64398-24-9 CAPLUS
 CN 11H-Indolo[3,2-c]quinoline-9-methanamine,
 3-chloro-8-methoxy-N,N-dimethyl-
 (9CI) (CA INDEX NAME)

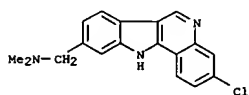
L7 ANSWER 137 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



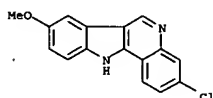
RN 116792-04-2 CAPLUS
 CN 11H-Indolo[3,2-c]quinoline-9-methanamine, 3-chloro-N,N-diethyl- (9CI)
 (CA INDEX NAME)



RN 116792-05-3 CAPLUS
 CN 11H-Indolo[3,2-c]quinoline-9-methanamine, 3-chloro-N,N-dimethyl- (9CI)
 (CA INDEX NAME)

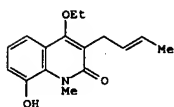


RN 116792-06-4 CAPLUS
 CN 11H-Indolo[3,2-c]quinoline, 3-chloro-8-methoxy- (9CI) (CA INDEX NAME)

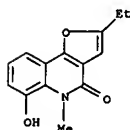


RN 116792-07-5 CAPLUS
 CN 11H-Indolo[3,2-c]quinoline, 3-chloro- (9CI) (CA INDEX NAME)

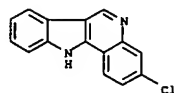
L7 ANSWER 138 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 1988:525871 CAPLUS
 DN 109:125871
 TI Glycolone: a new 2-quinolone alkaloid from Glycosmis pentaphylla (Retz)
 DC
 AU Sinha, S. K. P.; Kumar, Prashant
 CS P.G. Dep. Chem., Bihar Univ., Muzaffarpur, 842 001, India
 SO Indian Journal of Chemistry, Section B: Organic Chemistry Including Medicinal Chemistry (1988), 27B(5), 460-1
 CODEN: IJCSDB; ISSN: 0376-4699
 DT Journal
 LA English
 GI



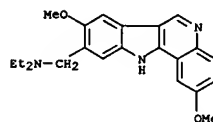
AB A new quinolone alkaloid named glycolone (I) was isolated from the root bark of *G. pentaphylla* and identified as 3-(but-2'-enyl)-4-ethoxy-8-hydroxy-1-methylquinolin-2(1H)-one on the basis of chemical tests and IR, UV and PMR spectral data. The presence of an ethoxy group at position-4 is unusual.
 IT 116339-98-1P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation of)
 RN 116339-98-1 CAPLUS
 CN Furo[3,2-c]quinolin-4(5H)-one, 2-ethyl-6-hydroxy-5-methyl- (9CI) (CA INDEX NAME)



L7 ANSWER 137 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



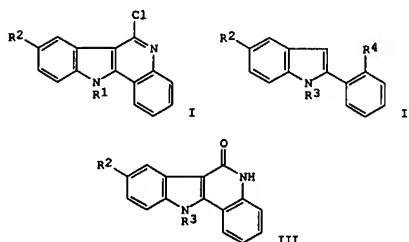
RN 116815-04-4 CAPLUS
 CN 11H-Indolo[3,2-c]quinoline-9-methanamine, N,N-diethyl-2,8-dimethoxy- (9CI)
 (CA INDEX NAME)



L7 ANSWER 139 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 1988:422954 CAPLUS
 DN 109:22954
 TI A process for the preparation of 6-chloro-11H-indolo[3,2-c]quinolines useful as intermediates in the pharmaceutical and chemical industry
 IN Bras, Jean Pierre; De Cointet, Paul
 PA SANOFI, Fr.
 SO Fr. Demande, 16 pp.
 CODEN: FRXXBL
 DT Patent
 LA French
 FAN. CNT 2

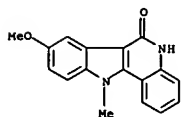
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
FR 2590899	A1	19870605	FR 1985-18210	19851202
EP 226508	A1	19870624	EP 1986-402676	19861202

R: AT, BE, CH, DE, ES, FR, GB, GR, IT, LI, LU, NL, SE
 PRAI FR 1985-18209 A 19851202
 FR 1985-18210 A 19851202
 QS CASREACT 109:22954
 GI

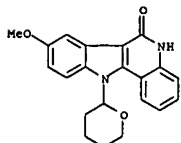


AB The title compds. [I; R1 = H, alkyl; R2 = alkoxy], useful as intermediates in the pharmaceutical and chemical industry, are prepared via (nitrophenyl)indoles II and indoloquinolinones III. I (R1 = Me, R2 = MeO) was prepared via cyclocondensation of MeCOC6H4NO2-o with p-MeOC6H4NH2, treatment of the resulting II (R2 = MeO, R3 = H, R4 = NO2) with MeI in DMF containing 50 % sodium hydride, hydrogenolysis of II (R2 = MeO, R3 = Me, R4 = NO2) in AcOH/MeOH over Pd/C, acylation of II (R2 = MeO, R3 = NH2, R4 = Me) with ClCO2Et in THF cong. pyridine at 60-70°, heating II (R2 = MeO, R3 = Me, R4 = NHCO2Et) in Ph2O at 200°, and refluxing the resulting III (R2 = MeO, R3 = Me) with POCl3.
 IT 114914-01-1P 114914-05-5P

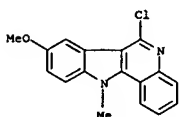
L7 ANSWER 139 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
 (Reactant or reagent)
 (prepn. and chlorination of)
 RN 114914-01-1 CAPLUS
 CN 6H-Indolo[3,2-c]quinolin-6-one, 5,11-dihydro-8-methoxy-11-methyl- (9CI)
 (CA INDEX NAME)



RN 114914-05-5 CAPLUS
 CN 6H-Indolo[3,2-c]quinolin-6-one, 5,11-dihydro-8-methoxy-11-(tetrahydro-2H-
 pyran-2-yl)- (9CI) (CA INDEX NAME)



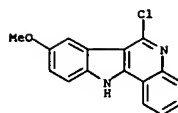
IT 114913-94-9P 114913-95-0P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation of, as intermediate for antitumor agents)
 RN 114913-94-9 CAPLUS
 CN 11H-Indolo[3,2-c]quinoline, 6-chloro-8-methoxy-11-methyl- (9CI) (CA
 INDEX NAME)



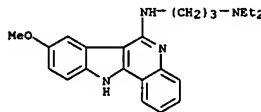
RN 114913-95-0 CAPLUS
 CN 11H-Indolo[3,2-c]quinoline, 6-chloro-8-methoxy- (9CI) (CA INDEX NAME)

L7 ANSWER 139 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

L7 ANSWER 139 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

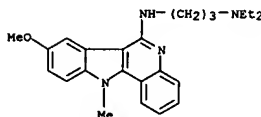


IT 114913-96-1P 114932-22-8P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation of, via condensation of chloroindoloquinolines with
 amines)
 RN 114913-96-1 CAPLUS
 CN 1,3-Propanediamine, N,N-diethyl-N'-(8-methoxy-11H-indolo[3,2-c]quinolin-6-
 yl)-, dihydrochloride (9CI) (CA INDEX NAME)



● 2 HCl

RN 114932-22-8 CAPLUS
 CN 1,3-Propanediamine, N,N-diethyl-N'-(8-methoxy-11-methyl-11H-indolo[3,2-
 c]quinolin-6-yl)-, dihydrochloride (9CI) (CA INDEX NAME)

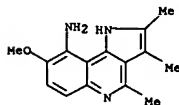


● 2 HCl

L7 ANSWER 140 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 1988:221575 CAPLUS
 DN 108:221575
 TI A convenient synthesis of 1H-pyrrolo[3,2-c]quinoline-6,9-dione and
 11H-indolo[3,2-c]quinoline-1,4-dione derivatives
 AU Helissey, Philippe; Parrot-Lopez, Helene; Renault, Jean; Cros, Suzanne
 CS Fac. Sci. Pharm. Biol., Univ. Rene Descartes, Paris, 75270, Fr.
 SO Chemical & Pharmaceutical Bulletin (1987), 35(9), 3547-57
 CODEN: CPBTAL; ISSN: 0009-2363
 DT Journal
 LA English
 OS CASREACT 108:221575
 GI

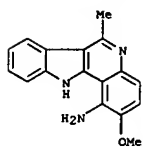
* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB Pyrroloquinolinediones I (R = MeO, aziridino; Z = O) and
 indoloquinolinediones II (R = OMe, piperidino, aziridino; Z = O) and III
 (R = OMe, aziridino; Z = O) were prepared and tested for antileukemia
 activity. I-III (R = aziridino, Z = O) all showed moderate activity.
 Condensation of hydrazinoquinolinamine IV (R1 = NH2) with MeCOEt and
 cyclohexanone gave IV (R1 = N:MeEt, cyclohexylideneamino), which
 underwent Fischer indolization to give the corresponding
 pyrroloquinolinamine and tetrahydroindoloquinolinamine, resp. The latter
 was aromatized to give indoloquinolinamine V. Oxidation of these
 quinolinamines with (KO3S)2NO gave I-III (R = MeO; Z = NH), which
 were hydrolyzed to give I-III (R = MeO, Z = O). Substitution of I-III
 (R = OMe, Z = O) with aziridino or piperidine gave I-III (R = aziridino,
 piperidino; Z = O).
 IT 114656-83-6P 114656-86-9P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
 (Reactant or reagent)
 (preparation and nitrosodisulfonate oxidation of)
 RN 114656-83-6 CAPLUS
 CN 1H-Pyrrolo[3,2-c]quinolin-9-amine, 8-methoxy-2,3,4-trimethyl- (9CI) (CA
 INDEX NAME)

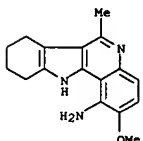


RN 114656-86-9 CAPLUS
 CN 11H-Indolo[3,2-c]quinolin-1-amine, 2-methoxy-6-methyl- (9CI) (CA INDEX
 NAME)

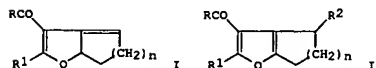
L7 ANSWER 140 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



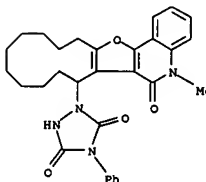
IT 114656-05-0P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
 (preparation, aromatization, and nitrosodisulfonate oxidation of)
 RN 114656-05-8 CAPLUS
 CN 7H-Indolo[3,2-c]quinolin-1-amine,
 8,9,10,11-tetrahydro-2-methoxy-6-methyl-
 (9CI) (CA INDEX NAME)



L7 ANSWER 141 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 1988:186457 CAPLUS
 DN 108:186457
 TI Ene reactions with 4-alkylidene-4,5-dihydrofuran derivatives
 AU Maischein, Juergen; Vilsmaier, Elmar
 CS Fachber. Chem., Univ. Kaiserslautern, Kaiserslautern, D-6750, Fed. Rep. Ger.
 SO Liebigs Annalen der Chemie (1988), (4), 371-5
 CODEN: LACHDL; ISSN: 0170-2041
 DT Journal
 LA German
 OS CASREACT 108:186457
 GI



AB Furans I (R1 = CH2Me2CH2, o-C6H4O, o-C6H4NMe, CH3MeO, CH2O; n = 1,7) underwent ene reaction with 4-phenyl-1,2,4-triazoline-3,5-dione, (NC)2C(CN)2, 4-MeC6H4SO2NCO, 4-MeC6H4SO2NSO, and benzylidene-Meldrum's acid to give the adducts II [R2 = 3,5-dioxo-4-phenyl-1,2,4-triazolidin-1-yl, C(CN)2CH(CN)2, CONHSO2C6H4Me-4, SONHSO2C6H4Me-4, (2,2-dimethyl-4,6-dioxo-1,3-dioxan-5-yl) (phenyl)methyl]. Treatment of I (R1 = o-C6H4O, n = 1,7) with N-bromosuccinimide gave II (R2 = Br).
 IT 113035-08-8
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (ene reaction of, with cycloalkafurans)
 RN 113035-08-8 CAPLUS
 CN 1,2,4-Triazolidine-3,5-dione, 1-(5,6,7,8,9,10,11,12,13,14,15,16-dodecahydro-5-methyl-6-oxocyclododeca[4,5]furo[3,2-c]quinolin-7-yl)-4-phenyl- (9CI) (CA INDEX NAME)



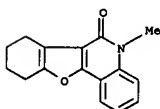
L7 ANSWER 142 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 1988:186200 CAPLUS
 DN 108:186200
 TI Synthesis and thermolysis of hydroxyalkene lactones or lactams possessing a morpholinobicycloalkyl moiety
 AU Maischein, Juergen; Vilsmaier, Elmar
 CS Fachbereich Chem., Univ. Kaiserslautern, Kaiserslautern, D-6750, Fed. Rep.

Ger.
 SO Liebigs Annalen der Chemie (1988), (4), 355-69
 CODEN: LACHDL; ISSN: 0170-2041
 DT Journal
 LA German
 OS CASREACT 108:186200
 GI For diagram(s), see printed CA Issue.

AB A morpholinobicycloalkyl moiety can be transferred easily to hydroxycoumarin, hydroxyquinone, hydroxypyrrone, hydroxypyridone, or tetrone acid by reaction with the N,O-acetals I (n = 3-5, 9). Thermolysis of the C-alkylation products, such as II [X = OC(Me):CH, OCH2], causes morpholine elimination and formation of alkylidenedihydrofurans III, preferentially in the case of a bicyclohexane- or a -dodecane system. Heating the corresponding bicycloheptane- or -octane derivs. II (n = 4, 5) in most cases effects a ring opening generating diacylenamines IV. Addnl., the course of the thermolysis is influenced by the type of CH-acid in II; increasing CH-acidity favors elimination of morpholine. Lactone or lactam structures

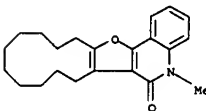
III are found for the alkylidenedihydrofurans isolated from the decomposition of II. III are isomerized quant. with acid catalysis to the corresponding furans.

IT 113087-45-9P 113087-46-0P
 RL: FRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
 (Preparation and spectra of)
 RN 113087-45-9 CAPLUS
 CN Benzofuro[3,2-c]quinolin-6(5H)-one, 7,8,9,10-tetrahydro-5-methyl- (9CI)
 (CA INDEX NAME)

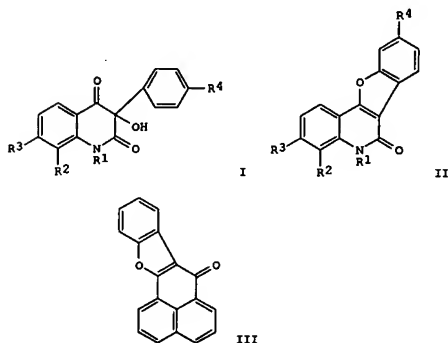


RN 113087-46-0 CAPLUS
 CN Cyclododeca[4,5]furo[3,2-c]quinolin-6(5H)-one,
 7,8,9,10,11,12,13,14,15,16-decahydro-5-methyl- (9CI) (CA INDEX NAME)

L7 ANSWER 142 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

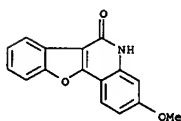


L7 ANSWER 143 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 1988:150338 CAPLUS
 DN 108:150338
 TI Synthesis of fused benzofurans by dehydration of cyclic
 phenyl- β -dicarbonyl compounds
 AU Kappe, Thomas; Brandner, Alexander; Stadlbauer, Wolfgang
 CS Inst. Org. Chem., Karl-Franzens-Univ., Graz, A-8010, Austria
 SO Monatshefte fuer Chemie (1987), 118(10), 1177-84
 CODEN: MOCHB7; ISSN: 0026-9247
 DT Journal
 LA German
 OS CASREACT 108:150338
 GI

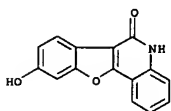


AB 3-Hydroxy-3-phenylquinoline-2,4-diones I [R1 = H, Me, Ph; R2 = H, R3 = H, MeO, Me, Cl; R4 = H, OH; R1R2 = (CH2)3, R3 = R4 = H] cyclize on treatment with strong acids to give benzofuroquinolones II. In analogy, 2-hydroxy-2-phenylphenalenedione furnishes the benzofurophenalene III.
 IT 57046-70-5P 76870-56-0P 76870-57-0P 76870-58-1P 106636-00-4P 113737-85-2P 113737-86-3P 113737-87-4P
 RL: SPN (Synthetic preparation); PREP (Preparation) (preparation of)
 RN 57046-70-5 CAPLUS
 CN Benzofuro[3,2-c]quinolin-6(5H)-one (9CI) (CA INDEX NAME)

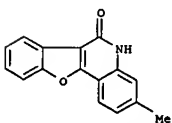
L7 ANSWER 143 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



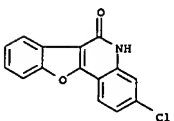
RN 113737-85-2 CAPLUS
 CN Benzofuro[3,2-c]quinolin-6(5H)-one, 9-hydroxy- (9CI) (CA INDEX NAME)



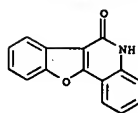
RN 113737-86-3 CAPLUS
 CN Benzofuro[3,2-c]quinolin-6(5H)-one, 3-methyl- (9CI) (CA INDEX NAME)



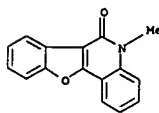
RN 113737-87-4 CAPLUS
 CN Benzofuro[3,2-c]quinolin-6(5H)-one, 3-chloro- (9CI) (CA INDEX NAME)



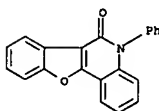
L7 ANSWER 143 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



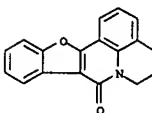
RN 76870-56-9 CAPLUS
 CN Benzofuro[3,2-c]quinolin-6(5H)-one, 5-methyl- (9CI) (CA INDEX NAME)



RN 76870-57-0 CAPLUS
 CN Benzofuro[3,2-c]quinolin-6(5H)-one, 5-phenyl- (9CI) (CA INDEX NAME)

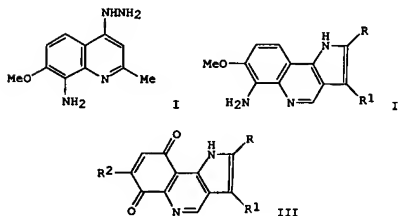


RN 76870-58-1 CAPLUS
 CN 4H,8H-Benzo[1,1']benzofuro[2,3-b]quinolizin-8-one, 5,6-dihydro- (9CI) (CA INDEX NAME)



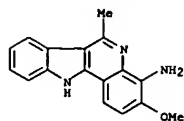
RN 106636-00-4 CAPLUS
 CN Benzofuro[3,2-c]quinolin-6(5H)-one, 3-methoxy- (9CI) (CA INDEX NAME)

L7 ANSWER 144 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 1988:150335 CAPLUS
 DN 108:150335
 TI Heterocyclic quinones. VIII. Synthesis and antineoplastic evaluation of 7-substituted-1H-pyrrolo[3,2-c]quinoline-6,9-diones and 3-substituted-11H-indolo[3,2-c]quinoline-1,4-diones
 AU Helissey, Philippe; Parrot-Lopez, Helene; Renault, Jean; Cros, Suzanne; Paoletti, Claude
 CS Fac. Sci. Pharm. Biol., Univ. Rene Descartes, Paris, 75270, Fr.
 SO European Journal of Medicinal Chemistry (1987), 22(4), 277-82
 CODEN: EJMCAS; ISSN: 0223-5234
 DT Journal
 LA English
 OS CASREACT 108:150335
 GI

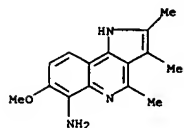


AB Condensation of hydrazinoquinolinamine I with butanone and cyclohexanone gave the corresponding hydrazones, which underwent Fischer indole cyclization to give pyrrolo- and indoloquinolinamines II [R = R1 = Me; R2 = (CH2)4]. Dehydrogenation of the latter with Pd gave III [RR1 = (CH:CH)2, R2 = aziridino; RR1 = (CH2)4, R2 = aziridino, piperidino]. These quinones are highly cytotoxic for L1210 cells, but no activity was found for P 388 lymphocytic leukemia in vivo.
 IT 113698-15-0P 113703-79-0P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent) (preparation and oxidation of, with Fremy's salt, quinone from)
 RN 113698-15-0 CAPLUS
 CN 11H-Indolo[3,2-c]quinolin-4-amine, 3-methoxy-6-methyl- (9CI) (CA INDEX NAME)

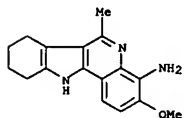
L7 ANSWER 144 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



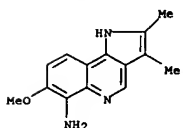
RN 113703-79-0 CAPLUS
CN 1H-Pyrrolo[3,2-c]quinolin-6-amine, 7-methoxy-2,3,4-trimethyl- (9CI) (CA INDEX NAME)



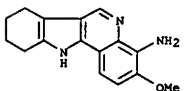
IT 113698-14-9P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation, dehydrogenation, and oxidation of)
RN 113698-14-9 CAPLUS
CN 7H-Indolo[3,2-c]quinolin-4-amine, 8,9,10,11-tetrahydro-3-methoxy-6-methyl- (9CI) (CA INDEX NAME)



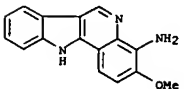
L7 ANSWER 145 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



RN 113124-66-6 CAPLUS
CN 7H-Indolo[3,2-c]quinolin-4-amine, 8,9,10,11-tetrahydro-3-methoxy- (9CI) (CA INDEX NAME)

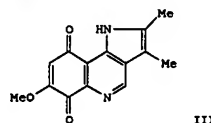
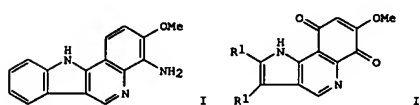


RN 113124-67-7 CAPLUS
CN 11H-Indolo[3,2-c]quinolin-4-amine, 3-methoxy- (9CI) (CA INDEX NAME)



L7 ANSWER 145 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN

AN 1988:112282 CAPLUS
DN 108:112282
TI Synthesis and cytotoxic activity of 7-methoxy-1H-pyrrolo[3,2-c]quinoline-6,9-dione and 3-methoxy-11H-indolo[3,2-c]quinoline-1,4-diones
AU Hellasey, Philippe; Perrot-Lopez, Helene; Renault, Jean; Cross, Suzanne
CS Fac. Sci. Pharm. Biol., Univ. Rene Descartes, 75270, Fr.
SO European Journal of Medicinal Chemistry (1987), 22(4), 366-8
CODEN: EJMCAS; ISSN: 0223-5234
DT Journal
LA English
OS CASREACT 108:112282
GI



AB Aminoindoloquinoline derivative I was treated with K nitrosodisulfonate to

give indoloquinolinedione II (R1R1 = benzo). Similarly prepared were II [R1R1 = CH2)4] and pyroloquinolinedione derivative III. The II and III exhibited anti-tumor activity.

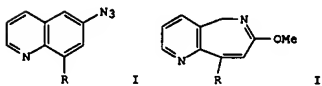
IT 113124-65-5P 113124-66-6P 113124-67-7P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation and oxidation of, quinone analog from)

RN 113124-65-5 CAPLUS
CN 1H-Pyrrolo[3,2-c]quinolin-6-amine, 7-methoxy-2,3-dimethyl- (9CI) (CA INDEX NAME)

L7 ANSWER 146 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN

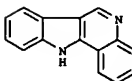
AN 1988:37681 CAPLUS
DN 108:37681
TI Synthetic routes to arylpyrido[2,3-c]azepines and -[3,2-c]azepines
AU Schofield, Joseph; Smalley, Robert K.; Scopes, David I. C.; Patel, Dalpat I.
CS Ramage Lab., Univ. Salford, Salford, M5 4WT, UK
SO Journal of Chemical Research, Synopses (1987), (5), 164-5
CODEN: JRPSCD; ISSN: 0308-2342
DT Journal
LA English
OS CASREACT 108:37681
GI



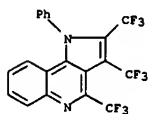
AB Photolysis of 6-azido-8-phenylquinoline I (R = Ph) in a mixture of 3M KOH-MeOH-dioxane gave 52% pyridoazepine II (R = Ph). Similarly photolysis of azidoquinolines I (R = 2-ClC6H4, 2,5-F2C6H3) in KOH-MeOH-dioxane gave II in 72 and 48% yields resp.

IT 239-09-8P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)

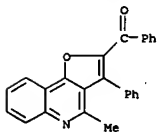
RN 239-09-8 CAPLUS
CN 11H-Indolo[3,2-c]quinoline (6CI, 7CI, 8CI, 9CI) (CA INDEX NAME)



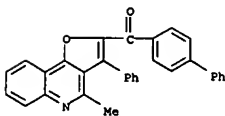
L7 ANSWER 147 OF 273 CAPLUS COPYRIGHT 2005 ACS ON STN
 AN 1988:29793 CAPLUS
 DN 108:29793
 TI Structures of 1-phenyl-2,3,4-tris(trifluoromethyl)pyrrolo[3,2-c]quinoline (1) and 2-fluoro-3-pentafluoroethyl-1-phenyl-2,3,4-tris(trifluoromethyl)-2,3-dihydropyrrolo[3,2-c]quinoline (2)
 AU Fan, Zhaochang; Chen, Lifu
 CS Shanghai Inst. Org. Chem., Acad. Sin., Shanghai, Peop. Rep. China
 SO Acta Crystallographica, Section C: Crystal Structure Communications (1987), C43(11), 2206-9
 CODEN: ACSCEE; ISSN: 0108-2701
 DT Journal
 LA English
 AB The title compound (1) is monoclinic, space group P2₁/c, with a 10.044(3), b 19.452(5), c 10.209(3) Å, and β 117.78(2)°; d.(calculated) = 1.687 for Z = 4; final R = 0.072 for 1940 reflections. Title compound (2) is orthorhombic, P2₁2₁2₁, with a 11.381(5), b 19.110(6), and c 9.982(5) Å; d.(calculated) = 1.794 for Z = 4; final R = 0.054 for 1919 reflections. Atomic coordinates are given. The lone electron pair of N(1) for (1) takes part in conjugation (the pyrrole and quinoline rings form a π-conjugated system), but there is no conjugated system in the pyrrole ring of (2). The bond lengths of C-C and C-F on C(2) and C(3) in (2) are longer than the normal values, probably due to steric hindrance.
 IT 87658-40-0
 RL: PRP (Properties)
 (crystal structure of)
 RN 87658-40-0 CAPLUS
 CN 1H-Pyrrolo[3,2-c]quinoline, 1-phenyl-2,3,4-tris(trifluoromethyl)- (9CI) (CA INDEX NAME)



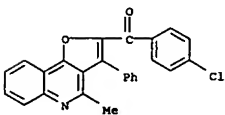
L7 ANSWER 148 OF 273 CAPLUS COPYRIGHT 2005 ACS ON STN (Continued)



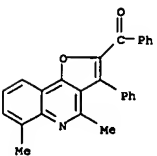
RN 111947-04-7 CAPLUS
 CN Methanone, [1,1'-biphenyl]-4-yl (4-methyl-3-phenylfuro[3,2-c]quinolin-2-yl)- (9CI) (CA INDEX NAME)



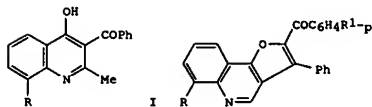
RN 111947-05-8 CAPLUS
 CN Methanone, (4-chlorophenyl) (4-methyl-3-phenylfuro[3,2-c]quinolin-2-yl)- (9CI) (CA INDEX NAME)



RN 111947-08-1 CAPLUS
 CN Methanone, (4,6-dimethyl-3-phenylfuro[3,2-c]quinolin-2-yl)phenyl- (9CI) (CA INDEX NAME)



L7 ANSWER 148 OF 273 CAPLUS COPYRIGHT 2005 ACS ON STN
 AN 1988:21749 CAPLUS
 DN 108:21749
 TI Synthesis and biological activity of furoquinolines:
 2-aryl-4-methyl-4,6-dimethyl-3-phenylfuro[3,2-c]quinolines
 AU Sharada, J.; Kumari, Y. Ratna; Rao, M. Kanakalingeswara
 CS Dep. Chem., Reg. Eng. Coll., Warangal, 506 004, India
 SO Indian Journal of Pharmaceutical Sciences (1987), 49(1), 17-21
 CODEN: IJSIDW; ISSN: 0250-474X
 DT Journal
 LA English
 OS CASREACT 108:21749
 GI

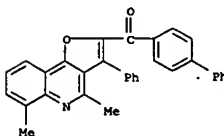


AB Cyclocondensation of 3-benzoyl-4-quinolins I (R = H, Me) with p-R1C6H4COCH2Br (R1 = H, Ph, Cl, MeO) gives arylfuroquinolines II. Demethylation of II (R = H, Me; R1 = OMe) followed by substitution reactions with R2CHCH2Cl.HCl (R2 = Et2N, pyrrolidino, piperidino, morpholino) gives III (R = H, Me; R1 = OCH2CH2R2). II were tested for antifertility, analgesic, and antiinflammatory activity. II (R = H, R1 = OCH2CH2R2, R2 = pyrrolidino) shows higher antiinflammatory activity than aspirin.

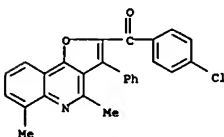
IT 111947-03-6P 111947-04-7P 111947-05-8P
 111947-08-1P 111947-09-2P 111947-10-5P
 111947-13-8P 111947-14-9P 111947-15-0P
 111947-16-1P 111947-17-2P 111947-18-3P
 111947-19-4P 111947-20-7P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation and antifertility, analgesic, and antiinflammatory activity of)
 RN 111947-03-6 CAPLUS
 CN Methanone, (4-methyl-3-phenylfuro[3,2-c]quinolin-2-yl)phenyl- (9CI) (CA INDEX NAME)

L7 ANSWER 148 OF 273 CAPLUS COPYRIGHT 2005 ACS ON STN (Continued)

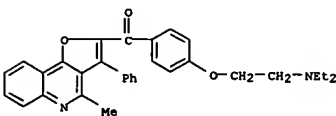
RN 111947-09-2 CAPLUS
 CN Methanone, [1,1'-biphenyl]-4-yl (4,6-dimethyl-3-phenylfuro[3,2-c]quinolin-2-yl)- (9CI) (CA INDEX NAME)



RN 111947-10-5 CAPLUS
 CN Methanone, (4-chlorophenyl) (4,6-dimethyl-3-phenylfuro[3,2-c]quinolin-2-yl)- (9CI) (CA INDEX NAME)

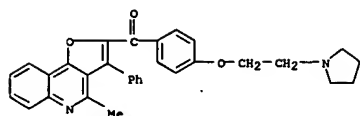


RN 111947-13-8 CAPLUS
 CN Methanone, [4-(2-(diethylamino)ethoxy)phenyl] (4-methyl-3-phenylfuro[3,2-c]quinolin-2-yl)- (9CI) (CA INDEX NAME)

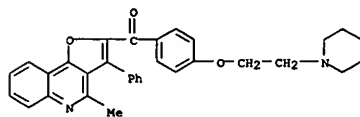


RN 111947-14-9 CAPLUS
 CN Methanone, (4-methyl-3-phenylfuro[3,2-c]quinolin-2-yl) [4-[2-(1-pyrrolidinyl)ethoxy]phenyl]- (9CI) (CA INDEX NAME)

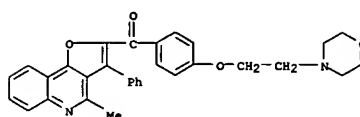
L7 ANSWER 148 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



RN 111947-15-0 CAPLUS
 CN Methanone, (4-methyl-3-phenylfuro[3,2-c]quinolin-2-yl)[4-(2-(1-piperidinyl)ethoxy)phenyl]- (9CI) (CA INDEX NAME)

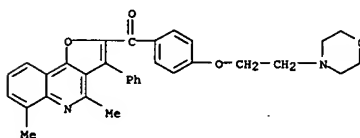


RN 111947-16-1 CAPLUS
 CN Methanone, (4-methyl-3-phenylfuro[3,2-c]quinolin-2-yl)[4-(2-(4-morpholinyl)ethoxy)phenyl]- (9CI) (CA INDEX NAME)

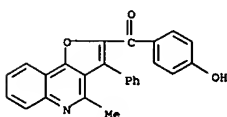


RN 111947-17-2 CAPLUS
 CN Methanone, [4-(2-(diethylamino)ethoxy)phenyl](4,6-dimethyl-3-phenylfuro[3,2-c]quinolin-2-yl)- (9CI) (CA INDEX NAME)

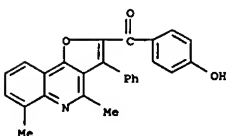
L7 ANSWER 148 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



IT 111947-07-0P 111947-12-7P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
 (preparation and substitution reactions of, with (chloroethyl)alkylamines)
 RN 111947-07-0 CAPLUS
 CN Methanone, (4-hydroxyphenyl)(4-methyl-3-phenylfuro[3,2-c]quinolin-2-yl)- (9CI) (CA INDEX NAME)

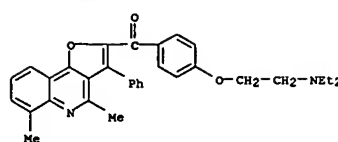


RN 111947-12-7 CAPLUS
 CN Methanone, (4,6-dimethyl-3-phenylfuro[3,2-c]quinolin-2-yl)(4-hydroxyphenyl)- (9CI) (CA INDEX NAME)

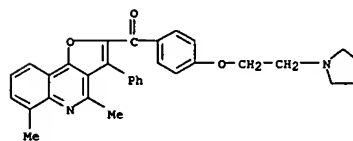


IT 111947-06-9P 111947-11-6P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation, antifertility, analgesic, antiinflammatory activity, and demethylation of)
 RN 111947-06-9 CAPLUS
 CN Methanone, (4-methoxyphenyl)(4-methyl-3-phenylfuro[3,2-c]quinolin-2-yl)- (9CI) (CA INDEX NAME)

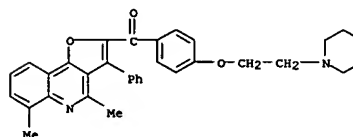
L7 ANSWER 148 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



RN 111947-18-3 CAPLUS
 CN Methanone, (4,6-dimethyl-3-phenylfuro[3,2-c]quinolin-2-yl)[4-(2-(1-pyrrolidinyl)ethoxy)phenyl]- (9CI) (CA INDEX NAME)

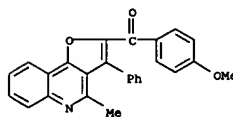


RN 111947-19-4 CAPLUS
 CN Methanone, (4,6-dimethyl-3-phenylfuro[3,2-c]quinolin-2-yl)[4-(2-(1-piperidinyl)ethoxy)phenyl]- (9CI) (CA INDEX NAME)

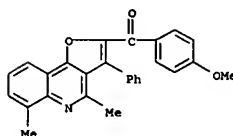


RN 111947-20-7 CAPLUS
 CN Methanone, (4,6-dimethyl-3-phenylfuro[3,2-c]quinolin-2-yl)[4-(2-(4-morpholinyl)ethoxy)phenyl]- (9CI) (CA INDEX NAME)

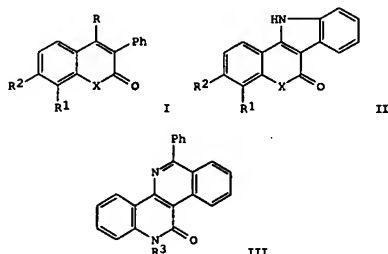
L7 ANSWER 148 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



RN 111947-11-6 CAPLUS
 CN Methanone, (4,6-dimethyl-3-phenylfuro[3,2-c]quinolin-2-yl)(4-methoxyphenyl)- (9CI) (CA INDEX NAME)

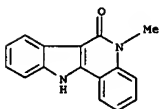


L7 ANSWER 149 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 1988:21691 CAPLUS
 DN 108:21691
 TI Organic azides in heterocyclic synthesis. Part 4. A convenient synthesis of 11H-indolo[3,2-c]quinolones
 AU Stadlbauer, Wolfgang; Karem, Abdul Salam; Kappe, Thomas
 CS Inst. Org. Chem., Karl-Franzens-Univ., Graz, A-8010, Austria
 SO Monatshefte fuer Chemie (1987), 118(1), 81-9
 CODEN: MOCHB7; ISSN: 0026-9247
 DT Journal
 LA German
 OS CASREACT 108:21691
 GI

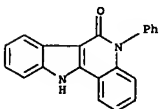


AB Aridolysis of phenylquinolones or benzopyranones [I; X = NH, NMe, NPh, O; R = Cl, 4-MeC6H4SO3; R2 = H, OMe, R1X = N(CH2)3] with NaN3 gave I (R = N3). Irradiation or thermal treatment of I (R = N3) gave γ -carbolone-containing indoloquinolones II. Hydrogenation of I (R = N3, R1, R2 = H, X = NH, NMe, NPh) gave I (R = NH2, R1, R2 = H, X = NH, NMe, NPh), which on cyclocondensation with PhCHO gave dibenzonaphthyridinones III (R3 = H, Me, Ph).
 IT 18735-98-3P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent) (preparation and chlorination of)
 RN 18735-98-3 CAPLUS
 CN 6H-Indolo[3,2-c]quinolin-6-one, 5,11-dihydro- (8CI, 9CI) (CA INDEX NAME)

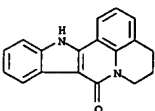
L7 ANSWER 149 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



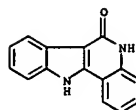
RN 91622-67-2 CAPLUS
 CN 6H-Indolo[3,2-c]quinolin-6-one, 5,11-dihydro-5-phenyl- (9CI) (CA INDEX NAME)



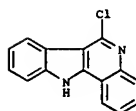
RN 111888-05-2 CAPLUS
 CN 8H-Benz[1,2-b:4,5-b']indolizino[1,2-a]quinolin-8-one, 4,5,6,13-tetrahydro- (9CI) (CA INDEX NAME)



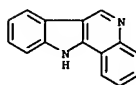
L7 ANSWER 149 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



IT 108832-13-9P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent) (preparation and reduction of)
 RN 108832-13-9 CAPLUS
 CN 11H-Indolo[3,2-c]quinoline, 6-chloro- (9CI) (CA INDEX NAME)



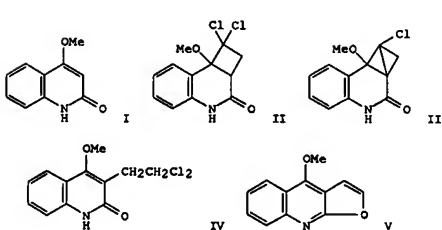
IT 239-09-8P 85149-47-9P 91622-67-2P
 111888-05-2P
 RL: SPN (Synthetic preparation); PREP (Preparation) (preparation of)
 RN 239-09-8 CAPLUS
 CN 11H-Indolo[3,2-c]quinoline (6CI, 7CI, 8CI, 9CI) (CA INDEX NAME)



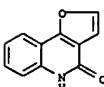
RN 85149-47-9 CAPLUS
 CN 6H-Indolo[3,2-c]quinolin-6-one, 5,11-dihydro-5-methyl- (9CI) (CA INDEX NAME)

L7 ANSWER 150 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN

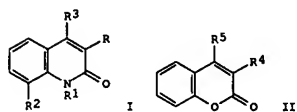
AN 1988:6240 CAPLUS
 DN 108:6240
 TI Cycloadditions in synthesis. XXXIV. A new method for introducing the 2,2-dichloroethyl group at the 3-position of the 2-quinoline system and the synthesis of dictamine
 AU Sato, Masayuki; Kawakami, Katsuhiro; Kaneko, Chikara
 CS Pharm. Inst., Tohoku Univ., Sendai, 980, Japan
 SO Chemical & Pharmaceutical Bulletin (1987), 35(3), 1319-21
 CODEN: CPBTAL; ISSN: 0009-2363
 DT Journal
 LA English
 OS CASREACT 108:6240
 GI



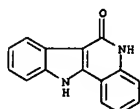
AB A method of introducing the Cl2CHCH2 group at the 3-position of 2-quinolones is described. The method from 4-substituted 2-quinolones consists of 1) photoaddn. of Cl2C:CH2 to quinolones, e.g., I, 2) base treatment of the cross adduct, e.g., II, giving a bicyclobutane, e.g., III, and 3) chlorination and ring cleavage of the latter with HCl to give the final product, e.g., IV, with HCl. Treating IV with K2CO3 gave 75% dictamine (V).
 IT 35136-12-0P
 RL: SPN (Synthetic preparation); PREP (Preparation) (preparation of)
 RN 35136-12-0 CAPLUS
 CN Furo[3,2-c]quinolin-4(5H)-one (6CI, 9CI) (CA INDEX NAME)



L7 ANSWER 151 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 1987:534174 CAPLUS
 DN 107:134174
 TI Synthesis of 4-azido-2(1H)-quinolones
 AU Stadlbauer, Wolfgang
 CS Inst. Org. Chem., Karl-Franzens-Univ., Graz, A-8010, Austria
 SO Monatshefte fuer Chemie (1986), 117(11), 1305-23
 CODEN: MOCHB7; ISSN: 0026-9247
 DT Journal
 LA German
 OS CASREACT 107:134174
 GI

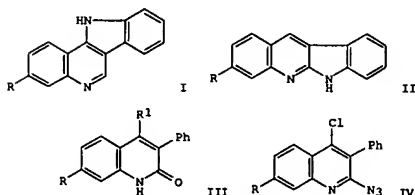


AB 4-Hydroxy-2-quinolinones I (R = H, Cl, NO₂, Ph, CH₂Ph, Et; R₁ = H, Me, Ph; R₂ = H; R₁R₂ = (CH₂)₃; R₃ = OH) were converted to the 4-azidocompounds I (R₃ = N₃) via the 4-chloroquinolones I (R₃ = Cl) the 4-tosyloxyquinolones I (R₃ = 4-MeC₆H₄SO₃), or the 4-aminoquinolones (R₃ = NH₂), resp. Choice of the reaction conditions and yields depend on the substituent in position 3 of the quinoline nucleus. For comparison the O-analogous coumarin derivs. II (R₄ = H, Br, NO₂, Ph, Et, CH₂Ph; R₅ = OH) have been studied to give the 4-azido derivs. II (R₅ = N₃) via the 4-chlorocoumarins II (R₅ = Cl).
 IT 18735-98-3P 85149-47-9P 91622-67-2P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation of)
 RN 18735-98-3 CAPLUS
 CN 6H-Indolo[3,2-c]quinolin-6-one, 5,11-dihydro- (8CI, 9CI) (CA INDEX NAME)

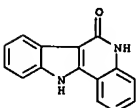


RN 85149-47-9 CAPLUS
 CN 6H-Indolo[3,2-c]quinolin-6-one, 5,11-dihydro-5-methyl- (9CI) (CA INDEX NAME)

L7 ANSWER 152 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 1987:423266 CAPLUS
 DN 107:23266
 TI Organic azides in heterocyclic synthesis. 5. Syntheses of benzo-α- and benzo-γ-carbolines via azidoquinolines
 AU Stadlbauer, Wolfgang; Kappe, Thomas
 CS Inst. Org. Chem., Karl-Franzens-Univ., Graz, A-6010, Austria
 SO Vestnik Slovenskega Kemijskega Društva (1986), 33(3), 271-81
 CODEN: VSKDAA; ISSN: 0560-3110
 DT Journal
 LA English
 GI

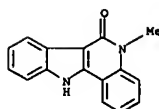


AB Indoloquinolines I and II (R = H, OMe), which contain the carboline system, were prepared by ring closure reactions of azidoquinolines III (R₁ = N₃) and IV resp. I was also obtained by the cyclodehydrogenation of III (R₁ = NH₂) by Pd.
 IT 18735-98-3P 108832-10-6P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
 (preparation and reaction of, with phosphoryl chloride, chloro derivative from)
 RN 18735-98-3 CAPLUS
 CN 6H-Indolo[3,2-c]quinolin-6-one, 5,11-dihydro- (8CI, 9CI) (CA INDEX NAME)

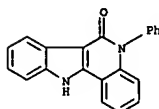


RN 108832-10-6 CAPLUS
 CN 6H-Indolo[3,2-c]quinolin-6-one, 5,11-dihydro-3-methoxy- (9CI) (CA INDEX NAME)

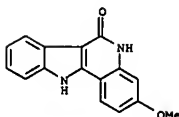
L7 ANSWER 151 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



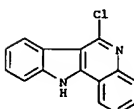
RN 91622-67-2 CAPLUS
 CN 6H-Indolo[3,2-c]quinolin-6-one, 5,11-dihydro-5-phenyl- (9CI) (CA INDEX NAME)



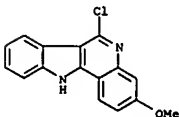
L7 ANSWER 152 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



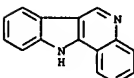
IT 108832-13-9P 108832-14-0P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
 (preparation and reduction of)
 RN 108832-13-9 CAPLUS
 CN 11H-Indolo[3,2-c]quinoline, 6-chloro- (9CI) (CA INDEX NAME)



RN 108832-14-0 CAPLUS
 CN 11H-Indolo[3,2-c]quinoline, 6-chloro-3-methoxy- (9CI) (CA INDEX NAME)

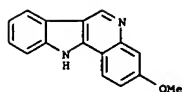


IT 239-09-8P 108832-03-7P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation of)
 RN 239-09-8 CAPLUS
 CN 11H-Indolo[3,2-c]quinoline (6CI, 7CI, 8CI, 9CI) (CA INDEX NAME)

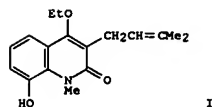


RN 108832-03-7 CAPLUS
 CN 11H-Indolo[3,2-c]quinoline, 3-methoxy- (9CI) (CA INDEX NAME)

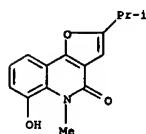
L7 ANSWER 152 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



L7 ANSWER 153 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 1987:116465 CAPLUS
 DN 106:116465
 TI Homo-glycosolone: a new quinolone alkaloid from Glycosmis pentaphylla (Retz) DC
 AU Kumar, Prashant; Das, B. P.; Sinha, S. K. P.
 CS Dep. Chem., Visva-Bharati, Santiniketan, 731 235, India
 SO Chemistry & Industry (London, United Kingdom) (1986), (19), 669-70
 CODEN: CHINAG; ISSN: 0009-3068
 DT Journal
 LA English
 GI



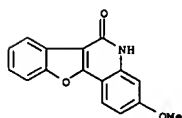
AB Extraction of the root bark of G. pentaphylla yielded a new quinolone alkaloid homoglycosolone (I), the structure of which was shown to be N-methyl-4-ethoxy-8-hydroxy-3-(3'-methylbut-2'-enyl)quinolin-2-one.
 IT 107030-40-0P
 RL: SPN (Synthetic preparation); PREP (Preparation) (preparation of)
 RN 107030-40-0 CAPLUS
 CN Furo[3,2-c]quinolin-4(5H)-one, 6-hydroxy-5-methyl-2-(1-methylethyl)-(9CI)
 (CA INDEX NAME)



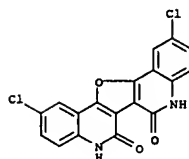
L7 ANSWER 154 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 1987:84361 CAPLUS
 DN 106:84361
 TI Potential non-steroidal estrogens and antiestrogens. I. Synthesis of some 7-methoxy-2-(1H)-quinolone derivatives
 AU El-Mariah, Fatma A. A.; Kappe, Thomas
 CS Coll. Girls, Ain-Shams Univ., Cairo, Egypt
 SO Croatica Chemica Acta (1986), 59(1), 171-6
 CODEN: CCACAA; ISSN: 0011-1643
 DT Journal
 LA English
 GI

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

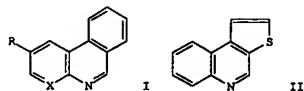
AB Quinolone I reacted with iodosobenzenes, prepared in situ from dichloroiodo compds. II (R = R₁ = H; R = OMe, R₁ = Cl) to give the iodonium ylides III.
 Thermal rearrangement of III gave quinolones IV (R₂ = iodo), which on reductive deiodination gave IV (R₂ = H). Photocyclization of IV (R = R₁ = H; R₂ = H, Cl) gave benzofuroquinolone V.
 IT 106636-00-4P
 RL: SPN (Synthetic preparation); PREP (Preparation) (preparation of)
 RN 106636-00-4 CAPLUS
 CN Benzofuro[3,2-c]quinolin-6(5H)-one, 3-methoxy- (9CI) (CA INDEX NAME)



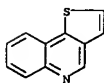
L7 ANSWER 155 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 1987:75987 CAPLUS
 DN 106:75987
 TI Synthesis and photochemical behavior of substituted 3,4-furandicarboxydianilides
 AU Fiser-Jakic, L.; Karminski-Zamola, G.
 CS Inst. Text. Clothing, Fac. Technol., Zagreb, Yugoslavia
 SO Croatica Chemica Acta (1986), 59(4), 891-4
 CODEN: CCACAA; ISSN: 0011-1643
 DT Journal
 LA English
 OS CASREACT 106:75987
 AB Some substituted 3,4-furandicarboxydianilides were prepared from the corresponding substituted anilines and 3,4-furandicarboxylic acid dichloride. All compds. were exposed to UV irradiation in methanolic solution, but under the conditions applied only p-chloro-substituted dianilide dehydrocyclized to the corresponding furo-bis-quinolone.
 IT 106611-66-9P
 RL: FORM (Formation, nonpreparative); PREP (Preparation) (formation of, in photolysis of dichlorofurandicarboxydianilide)
 RN 106611-66-9 CAPLUS
 CN Furo[3,2-c:4,5-c']diquinoline-6,7-dione, 2,11-dichloro-5,8-dihydro- (9CI) (CA INDEX NAME)



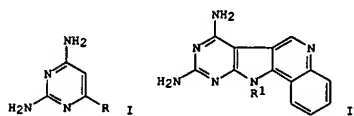
L7 ANSWER 156 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 1987:67163 CAPLUS
 DN 106:67163
 TI A new convenient synthesis of phenanthridine and some benzo- and
 thieno-c-fused quinolines and 1,8-naphthyridines
 AU Gronowitz, S.; Hoernfeldt, A. B.; Yang, Y. H.
 CS Chem. Cent., Univ. Lund, Lund, S-221 00, Swed.
 SO Chemica Scripta (1986), 26(2), 311-14
 CODEN: CSRPB9; ISSN: 0004-2056
 DT Journal
 LA English
 OS CASREACT 106:67163
 GI



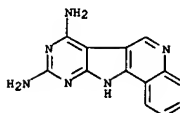
AB Title compds., e.g., I (X = CH, R = H; X = N, R = Me) and II were
 prepared
 by reacting 2-formylbenzeneboronic acid or isomeric
 formylthiopheneboronic
 acids with 2-bromoaniline or 2-amino-3-bromo-5-methylpyridine in the
 presence of (Ph₃P)4Pd catalyst in basic medium.
 IT 234-43-59
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation of)
 RN 234-43-5 CAPLUS
 CN Thieno[3,2-c]quinoline (8CI, 9CI) (CA INDEX NAME)



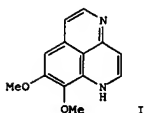
L7 ANSWER 157 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 1986:68810 CAPLUS
 DN 104:68810
 TI Synthesis of a novel tetracyclic ring system: 11H-
 pyrimido[5',4':4,5]pyrrolo[3,2-c]quinoline-7,9-diamine
 AU Wang, Hui Po; Werbel, Leslie M.
 CS Sch. Pharm., Natl. Taiwan Univ., Taipei, Taiwan
 SO Taiwan Yaokue Zazhi (1984), 36(4), 204-10
 CODEN: JTFHAC; ISSN: 0368-4520
 DT Journal
 LA English
 GI



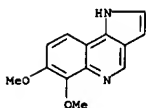
AB Treating barbituric acid with POCl₃ and PhNMe₂ gave 92%
 2,4,6-trichloropyrimidine which was aminated by NH₃ in EtOH to give 73%
 diamine I (R = Cl) followed by treatment with N₂H₄ to give 77% I (R =
 NHNH₂). The latter was cyclized by 2,3-dihydro-4(1H)-quinolinone in
 diethylene glycol 6 h at 220° to give 15% pyrimidopyrroloquinoline
 II (R1 = H), a potential antimalarial which was inactive against
 Plasmodium berghei in mice at 640 mg/kg. Addnl. obtained was II (R1 =
 Me).
 IT 100161-92-0F
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation of, as potential antimalarial)
 RN 100161-92-0 CAPLUS
 CN 8H-Pyrimido[5',4':4,5]pyrrolo[3,2-c]quinoline-7,9-diamine (9CI) (CA
 INDEX NAME)



L7 ANSWER 158 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 1986:51010 CAPLUS
 DN 104:51010
 TI A synthesis of aptamine
 AU Kelly, T. Ross; Maguire, Martin P.
 CS Dep. Chem., Boston Coll., Chestnut Hill, MA, 02167, USA
 SO Tetrahedron (1985), 41(15), 3033-6
 CODEN: TETRA8; ISSN: 0040-4020
 DT Journal
 LA English
 OS CASREACT 104:51010
 GI

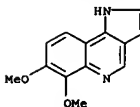


AB A five-step synthesis of the unusual marine alkaloid aptamine (I) from
 veratrole is described.
 IT 99878-81-6P 99878-82-7P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation of)
 RN 99878-81-6 CAPLUS
 CN 1H-Pyrrolo[3,2-c]quinoline, 6,7-dimethoxy- (9CI) (CA INDEX NAME)



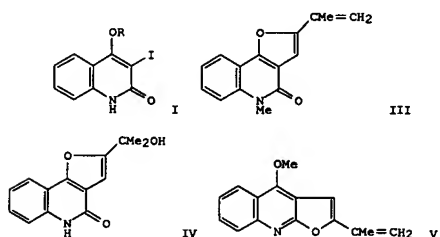
RN 99878-82-7 CAPLUS
 CN 1H-Pyrrolo[3,2-c]quinoline, 6,7-dimethoxy-, monohydrochloride (9CI) (CA
 INDEX NAME)

L7 ANSWER 158 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



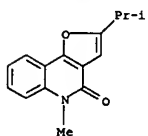
● HCl

L7 ANSWER 159 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 1985:560420 CAPLUS
 DN 103:160420
 TI Quinoline alkaloids. Part 25. Synthesis of isopropenylfuroquinolines and
 a hydroxyisopropenylfuroquinolinone from copper(I) acetylides
 AU Gaston, John L.; Greer, Robert J.; Grundon, Michael P.
 CS Dep. Chem., Univ. Ulster, Coleraine, BT52 1SA, UK
 SO Journal of Chemical Research, Synopses (1985), (5), 135
 CODEN: JRPSDC; ISSN: 0308-2342
 DT Journal
 LA English
 OS CASREACT 103:160420
 GI

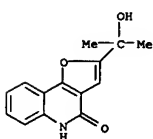


AB Treatment of 3-haloquinolin-2-ones with copper(I) acetylides gave isopropenylfuroquinolines exclusively in yields $\leq 75\%$; this provides an entry to dihydroisopropenylfuroquinoline alkaloids. E.g., treatment of quinoline I (R = H) with CuC.tplbond.CCMe:CH2 (II) in refluxing pyridine for 2 h gave 75% furoquinoline III, whereas similar treatment of I (R = H) with CuC.tplbond.CCR1Me2 (R1 = tetrahydropyranyloxy), followed by deprotection with aqueous HCl, gave 48% hydroxyisopropenylfuroquinoline IV. Similar treatment of I (R = Me) with II gave 72% isopropenylmethoxyfuroquinoline V. The ^{13}C NMR spectra of 3-halo-4-methoxy-2-quinolinones are discussed.
 IT 98751-19-0P 98751-21-4P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
 (preparation and catalytic hydrogenation of)
 RN 98751-19-0 CAPLUS
 CN Furo[3,2-c]quinolin-4(5H)-one, 5-methyl-2-(1-methylethenyl)- (9CI) (CA INDEX NAME)

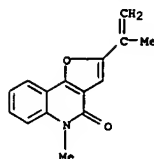
L7 ANSWER 159 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



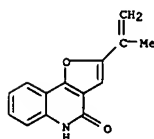
RN 98751-22-5 CAPLUS
 CN Furo[3,2-c]quinolin-4(5H)-one, 2-(1-hydroxy-1-methylethyl)- (9CI) (CA INDEX NAME)



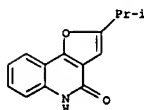
L7 ANSWER 159 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



RN 98751-21-4 CAPLUS
 CN Furo[3,2-c]quinolin-4(5H)-one, 2-(1-methylethenyl)- (9CI) (CA INDEX NAME)

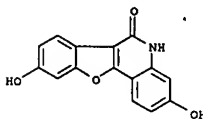


IT 97339-09-8P 98751-20-3P 98751-22-5P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation of)
 RN 97339-09-8 CAPLUS
 CN Furo[3,2-c]quinolin-4(5H)-one, 2-(1-methylethyl)- (9CI) (CA INDEX NAME)

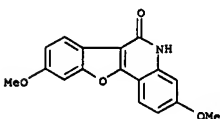


RN 98751-20-3 CAPLUS
 CN Furo[3,2-c]quinolin-4(5H)-one, 5-methyl-2-(1-methylethyl)- (9CI) (CA INDEX NAME)

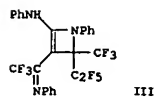
L7 ANSWER 160 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 1984:591736 CAPLUS
 DN 101:191736
 TI The synthesis of benzofuroquinolines. III. Two dihydroxybenzofuroquinolinones
 AU Yamaguchi, Seiji; Yoshimoto, Yoshiteru; Murai, Rikuko; Masuda, Fumihiko; Yamada, Minoru; Kawase, Yoshiyuki
 CS Fac. Sci., Toyama Univ., Toyama, 930, Japan
 SO Journal of Heterocyclic Chemistry (1984), 21(3), 737-9
 CODEN: JHTCAD; ISSN: 0022-152X
 DT Journal
 LA English
 OS CASREACT 101:191736
 AB Two dihydroxybenzofuroquinolinones, 3,9-dihydroxy-5H-benzofuro[3,2-c]quinolin-6-one (I) and 3,8-dihydroxy-6H-benzofuro[2,3-b]quinolin-11-one (II), were obtained by the demethylation-cyclization of 3-(2,4-dimethoxyphenyl)-4-hydroxy-7-methoxy-1H-quinolin-2-one. Methylation of I with CH2N2 gave a dimethylated compound, while II gave a trimethylated compound
 IT 92741-84-9P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
 (preparation and methylation of)
 RN 92741-84-9 CAPLUS
 CN Benzofuro[3,2-c]quinolin-6(5H)-one, 3,9-dihydroxy- (9CI) (CA INDEX NAME)



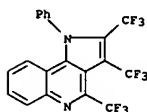
IT 92741-86-1P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation of)
 RN 92741-86-1 CAPLUS
 CN Benzofuro[3,2-c]quinolin-6(5H)-one, 3,9-dimethoxy- (9CI) (CA INDEX NAME)



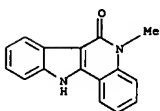
L7 ANSWER 161 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 1984:551547 CAPLUS
 DN 101:151547
 TI Reaction of tetrafluoroethylene oligomer. IV. Reaction of the tetramer and pentamer of tetrafluoroethylene with aromatic amines
 AU Chen, Lifo; Wu, Jinlong; Wang, Junhuan
 CS Shanghai Inst. Org. Chem., Acad. Sin., Shanghai, Peop. Rep. China
 SO Huaxue Xuebao (1984), 42(5), 470-8
 CODEN: HHHHPA4; ISSN: 0567-7351
 DT Journal
 LA Chinese
 OS CASREACT 101:151547
 GI



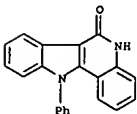
AB Reaction of $C_2F_5C(CF_3):C(CF_3)C_2F_5$ (I) and $C_2F_5CF(CF_3)C(CF_3):CFCF_3$ with $PhNH_2$ (II) and β -naphthylamine was described. Thus, I reacted with II in 1:1 mol ratio to give $PhN:CFC(C_2F_5):C(C_2F_5)CF_3$, $C_2F_5C(CF_3):C(CF:NPh)C(CF_3):NPh$, and a small amount of azetidine III.
 IT 87658-40-0P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation of)
 RN 87658-40-0 CAPLUS
 CN 1H-Pyrrolo[3,2-c]quinoline, 1-phenyl-2,3,4-tris(trifluoromethyl)- (9CI)
 (CA INDEX NAME)



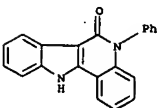
L7 ANSWER 162 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)
 RN 85149-47-9 CAPLUS
 CN 6H-Indolo[3,2-c]quinolin-6-one, 5,11-dihydro-5-methyl- (9CI) (CA INDEX NAME)



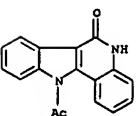
RN 91622-66-1 CAPLUS
 CN 6H-Indolo[3,2-c]quinolin-6-one, 5,11-dihydro-11-phenyl- (9CI) (CA INDEX NAME)



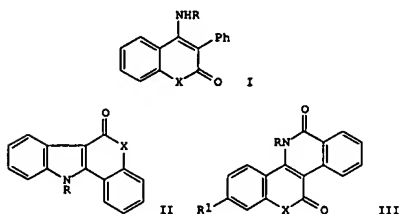
RN 91622-67-2 CAPLUS
 CN 6H-Indolo[3,2-c]quinolin-6-one, 5,11-dihydro-5-phenyl- (9CI) (CA INDEX NAME)



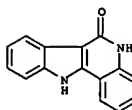
RN 91622-68-3 CAPLUS
 CN 6H-Indolo[3,2-c]quinolin-6-one, 11-acetyl-5,11-dihydro- (9CI) (CA INDEX NAME)



L7 ANSWER 162 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 1984:510773 CAPLUS
 DN 101:110773
 TI Synthesis of indoles and isoquinolones from phenylmalonate heterocycles
 AU Stadlbauer, Wolfgang; Kappe, Thomas
 CS Inst. Org. Chem., Karl-Franzens-Univ. Graz, Graz, A-8010, Austria
 SO Monatshefte fuer Chemie (1984), 115(4), 467-75
 CODEN: MOCHB7; ISSN: 0026-9247
 DT Journal
 LA German
 OS CASREACT 101:110773
 GI

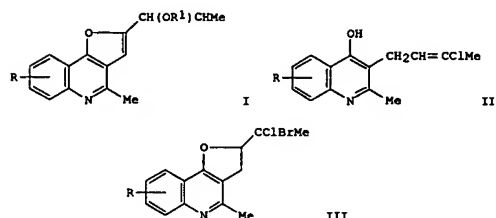


AB The indole ring system was peptd. by cyclodehydrogenation of amino phenylmalonate heterocycles. Thus, the amines I (X = O, NH, R = H, Ph; X = NMe, NPh, R = H; X = NH, R = Ac) are converted to the indoles II with Pd-C in boiling Ph2O. The reaction of I with (PhO)2CO yields the fused isoquinoline III (R = H, Ph; R1 = H, Me; X = O, NH).
 IT 18735-98-3P 85149-47-9P 91622-66-1P
 91622-67-2P 91622-68-3P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation of)
 RN 18735-98-3 CAPLUS
 CN 6H-Indolo[3,2-c]quinolin-6-one, 5,11-dihydro- (8CI, 9CI) (CA INDEX NAME)



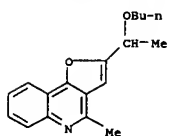
L7 ANSWER 162 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

L7 ANSWER 163 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 1984:68198 CAPLUS
 DN 100:68198
 TI Synthesis and study of the antianaphylactic activity of
 2-[(1-alkoxyethyl)-4-methylfuro[3,2-c]quinolines
 AU Gyul'budagyan, L. V.; Aleksanyan, I. L.; Ionov, I. D.; Shaidrov, V. V.
 CS Erevan. Univ., Yerevan, USSR
 SO Khimiko-Farmatsevticheskii Zhurnal (1983), 17(9), 1072-6
 CODEN: KHFZAN; ISSN: 0023-1134
 DT Journal
 LA Russian
 OS CASREACT 100:68198
 GI

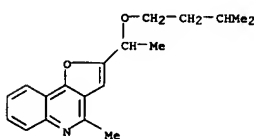


AB The title compds. I (R = H, 6-MeO, 6-Cl, 8-Br, 8-MeO, R1 = H, Me2CH, Me2CHCH2, Bu, isopentyl, Et, Me, pentyl) and their hydrochlorides, useful as antianaphylactic agents, were prepared in 84.6-96.7% yields by treatment of quinolines II with bromine to give intermediates III which were dehalogenated and substituted by R1ONa.
 IT 88654-58-4P 88654-59-5P 88654-60-8P
 88654-61-9P 88654-62-0P 88654-63-1P
 88654-64-2P 88654-65-3P 88654-66-4P
 88654-67-5P 88654-68-6P 88654-69-7P
 88654-70-0P 88654-71-1P 88654-72-2P
 88654-73-3P 88654-74-4P 88654-75-5P
 88784-81-6P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation and antianaphylactic activity of)
 RN 88654-58-4 CAPLUS
 CN Furo[3,2-c]quinoline-2-methanol, α ,4-dimethyl- (9CI) (CA INDEX NAME)

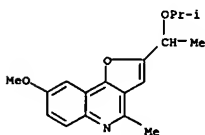
L7 ANSWER 163 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



RN 88654-62-0 CAPLUS
 CN Furo[3,2-c]quinoline, 4-methyl-2-[(1-(3-methylbutoxy)ethyl)- (9CI) (CA INDEX NAME)

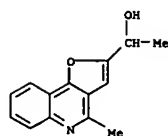


RN 88654-63-1 CAPLUS
 CN Furo[3,2-c]quinoline, 8-methoxy-4-methyl-2-[(1-(1-methylethoxy)ethyl)- (9CI) (CA INDEX NAME)

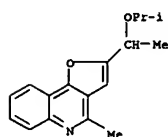


RN 88654-64-2 CAPLUS
 CN Furo[3,2-c]quinoline, 6-methoxy-4-methyl-2-[(1-(2-methylpropoxy)ethyl)- (9CI) (CA INDEX NAME)

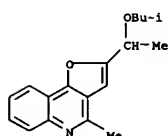
L7 ANSWER 163 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



RN 88654-59-5 CAPLUS
 CN Furo[3,2-c]quinoline, 4-methyl-2-[(1-(1-methylethoxy)ethyl)- (9CI) (CA INDEX NAME)

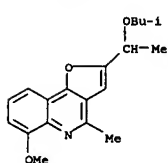


RN 88654-60-8 CAPLUS
 CN Furo[3,2-c]quinoline, 4-methyl-2-[(1-(2-methylpropoxy)ethyl)- (9CI) (CA INDEX NAME)

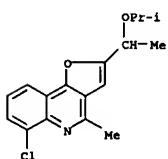


RN 88654-61-9 CAPLUS
 CN Furo[3,2-c]quinoline, 2-(1-butoxyethyl)-4-methyl- (9CI) (CA INDEX NAME)

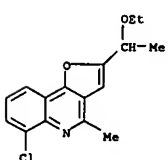
L7 ANSWER 163 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



RN 88654-65-3 CAPLUS
 CN Furo[3,2-c]quinoline, 6-chloro-4-methyl-2-[(1-(1-methylethoxy)ethyl)- (9CI) (CA INDEX NAME)

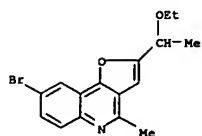


RN 88654-66-4 CAPLUS
 CN Furo[3,2-c]quinoline, 6-chloro-2-(1-ethoxyethyl)-4-methyl- (9CI) (CA INDEX NAME)

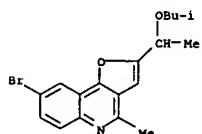


RN 88654-67-5 CAPLUS
 CN Furo[3,2-c]quinoline, 8-bromo-2-(1-ethoxyethyl)-4-methyl- (9CI) (CA INDEX NAME)

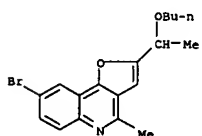
L7 ANSWER 163 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



RN 88654-68-6 CAPLUS
 CN Furo[3,2-c]quinoline, 8-bromo-4-methyl-2-[(2-methylpropoxy)ethyl]- (9CI) (CA INDEX NAME)

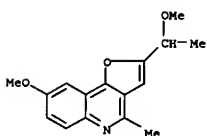


RN 88654-69-7 CAPLUS
 CN Furo[3,2-c]quinoline, 8-bromo-2-(1-butoxyethyl)-4-methyl- (9CI) (CA INDEX NAME)

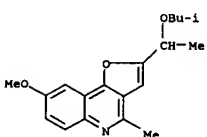


RN 88654-70-0 CAPLUS
 CN Furo[3,2-c]quinoline, 8-bromo-4-methyl-2-[(3-methylbutoxy)ethyl]- (9CI) (CA INDEX NAME)

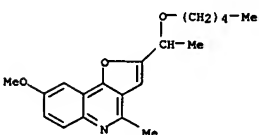
L7 ANSWER 163 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



RN 88654-74-4 CAPLUS
 CN Furo[3,2-c]quinoline, 8-methoxy-4-methyl-2-[(2-methylpropoxy)ethyl]- (9CI) (CA INDEX NAME)

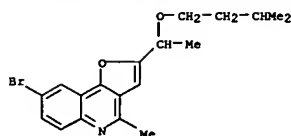


RN 88654-75-5 CAPLUS
 CN Furo[3,2-c]quinoline, 8-methoxy-4-methyl-2-[(1-pentyloxy)ethyl]- (9CI) (CA INDEX NAME)

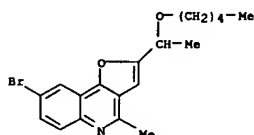


RN 89784-81-6 CAPLUS
 CN Furo[3,2-c]quinoline, 6-methoxy-4-methyl-2-[(1-methylethoxy)ethyl]- (9CI) (CA INDEX NAME)

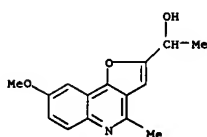
L7 ANSWER 163 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



RN 88654-71-1 CAPLUS
 CN Furo[3,2-c]quinoline, 8-bromo-4-methyl-2-[(1-pentyloxy)ethyl]- (9CI) (CA INDEX NAME)

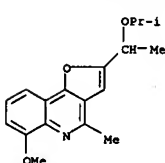


RN 88654-72-2 CAPLUS
 CN Furo[3,2-c]quinoline-2-methanol, 8-methoxy-α,4-dimethyl- (9CI) (CA INDEX NAME)



RN 88654-73-3 CAPLUS
 CN Furo[3,2-c]quinoline, 8-methoxy-2-(1-methoxyethyl)-4-methyl- (9CI) (CA INDEX NAME)

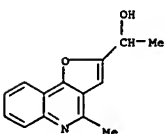
L7 ANSWER 163 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



IT 88654-76-6P 88654-77-7P 88654-78-8P
 88654-79-9P 88654-80-2P 88654-81-3P
 88654-82-4P 88654-83-5P 88654-84-6P
 88654-85-7P 88654-86-8P 88654-87-9P
 88654-88-0P 88654-89-1P 88654-90-4P
 88654-91-5P 88654-92-6P 88659-32-9P
 89784-82-7P

RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation of)

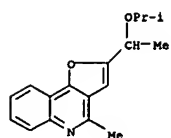
RN 88654-76-6 CAPLUS
 CN Furo[3,2-c]quinoline-2-methanol, α,4-dimethyl-, hydrochloride (9CI) (CA INDEX NAME)



● HCl

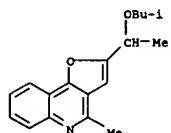
RN 88654-77-7 CAPLUS
 CN Furo[3,2-c]quinoline, 4-methyl-2-[(1-methylethoxy)ethyl]-, hydrochloride (9CI) (CA INDEX NAME)

L7 ANSWER 163 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



● HCl

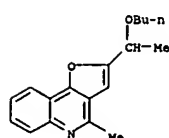
RN 88654-78-8 CAPLUS
 CN Furo[3,2-c]quinoline, 4-methyl-2-[(2-methylpropoxy)ethyl]-, hydrochloride (9CI) (CA INDEX NAME)



● HCl

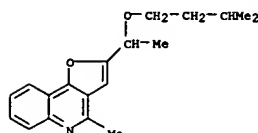
RN 88654-79-9 CAPLUS
 CN Furo[3,2-c]quinoline, 2-[(1-butoxyethyl)-4-methyl]-, hydrochloride (9CI) (CA INDEX NAME)

L7 ANSWER 163 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



● HCl

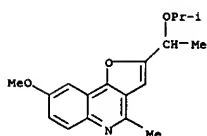
RN 88654-80-2 CAPLUS
 CN Furo[3,2-c]quinoline, 4-methyl-2-[(3-methylbutoxy)ethyl]-, hydrochloride (9CI) (CA INDEX NAME)



● HCl

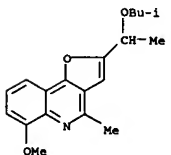
RN 88654-81-3 CAPLUS
 CN Furo[3,2-c]quinoline, 8-methoxy-4-methyl-2-[(1-methylethoxy)ethyl]-, hydrochloride (9CI) (CA INDEX NAME)

L7 ANSWER 163 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



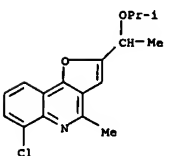
● HCl

RN 88654-82-4 CAPLUS
 CN Furo[3,2-c]quinoline, 6-methoxy-4-methyl-2-[(2-methylpropoxy)ethyl]-, hydrochloride (9CI) (CA INDEX NAME)



● HCl

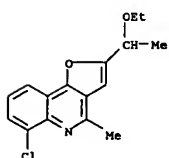
RN 88654-83-5 CAPLUS
 CN Furo[3,2-c]quinoline, 6-chloro-4-methyl-2-[(1-methylethoxy)ethyl]-, hydrochloride (9CI) (CA INDEX NAME)



● HCl

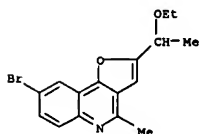
L7 ANSWER 163 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

RN 88654-84-6 CAPLUS
 CN Furo[3,2-c]quinoline, 6-chloro-2-[(ethoxy)ethyl]-4-methyl-, hydrochloride (9CI) (CA INDEX NAME)



● HCl

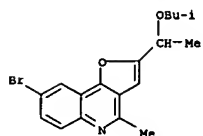
RN 88654-85-7 CAPLUS
 CN Furo[3,2-c]quinoline, 8-bromo-2-[(ethoxy)ethyl]-4-methyl-, hydrochloride (9CI) (CA INDEX NAME)



● HCl

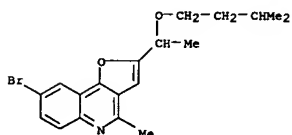
RN 88654-86-8 CAPLUS
 CN Furo[3,2-c]quinoline, 8-bromo-4-methyl-2-[(2-methylpropoxy)ethyl]-, hydrochloride (9CI) (CA INDEX NAME)

L7 ANSWER 163 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



● HCl

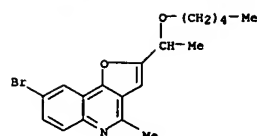
RN 88654-87-9 CAPLUS
 CN Furo[3,2-c]quinoline, 8-bromo-4-methyl-2-[1-(3-methylbutoxy)ethyl]-, hydrochloride (9CI) (CA INDEX NAME)



● HCl

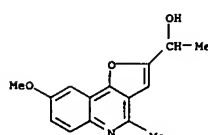
RN 88654-88-0 CAPLUS
 CN Furo[3,2-c]quinoline, 8-bromo-4-methyl-2-[1-(pentyloxy)ethyl]-, hydrochloride (9CI) (CA INDEX NAME)

L7 ANSWER 163 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



● HCl

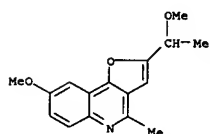
RN 88654-89-1 CAPLUS
 CN Furo[3,2-c]quinoline-2-methanol, 8-methoxy-α,4-dimethyl-, hydrochloride (9CI) (CA INDEX NAME)



● HCl

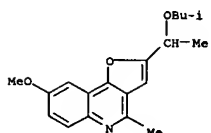
RN 88654-90-4 CAPLUS
 CN Furo[3,2-c]quinoline, 8-methoxy-2-[(1-methoxyethyl)-4-methyl-, hydrochloride (9CI) (CA INDEX NAME)

L7 ANSWER 163 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



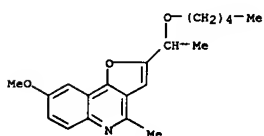
● HCl

RN 88654-91-5 CAPLUS
 CN Furo[3,2-c]quinoline, 8-methoxy-4-methyl-2-[1-(2-methylpropoxy)ethyl]-, hydrochloride (9CI) (CA INDEX NAME)



● HCl

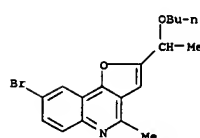
RN 88654-92-6 CAPLUS
 CN Furo[3,2-c]quinoline, 8-methoxy-4-methyl-2-[1-(pentyloxy)ethyl]-, hydrochloride (9CI) (CA INDEX NAME)



● HCl

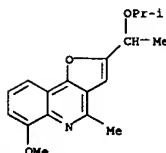
RN 88659-32-9 CAPLUS

L7 ANSWER 163 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)
 CN Furo[3,2-c]quinoline, 8-bromo-2-(1-butoxyethyl)-4-methyl-, hydrochloride (9CI) (CA INDEX NAME)



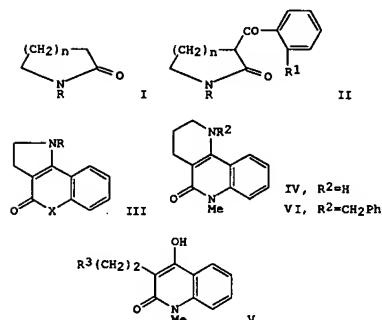
● HCl

RN 89784-82-7 CAPLUS
 CN Furo[3,2-c]quinoline, 6-methoxy-4-methyl-2-[1-(1-methylethoxy)ethyl]-, hydrochloride (9CI) (CA INDEX NAME)



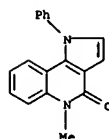
● HCl

L7 ANSWER 164 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 1984:34442 CAPLUS
 DN 100:34442
 TI Studies on pyran derivatives. Part 97. Cyclization of
 α -(2-mercaptobenzoyl)- and α -(2-aminobenzoyl)lactams;
 synthesis of benzothioopyrano[4,3-b]pyrrolinones and pyrrolino- or
 tetrahydropyridino[3,2-c]quinolinones
 AU Eiden, Fritz; Baumann, Egmont
 CS Inst. Pharm. Lebensmittelchem., Univ. Muenchen, Munich, 8000/2, Fed. Rep.
 Ger.
 SO Archiv der Pharmazie (Weinheim, Germany) (1983), 316(11),
 897-907
 CODEN: ARPMAS; ISSN: 0365-6233
 DT Journal
 LA German
 OS CASREACT 100:34442
 GI

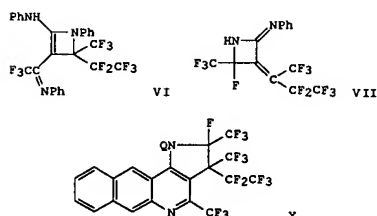


AB Condensation of azolones I (R = Me, Ph, 3,4-Cl₂C₆H₃, CH₂Ph; n = 1, 2)
 with
 2-R₁CH₄CO₂Me (R₁ = SH, NH₂, NHMe, NHAc) gave acylated azolones II, some
 of which cyclized on heating to give annulated pyrrolines III (R = Me,
 Ph,
 X = S, NMe; R = 3,4-Cl₂C₆H₃, X = NMe). Adding pyridine-HCl caused
 removal
 of the pyrrolino N-Me group to give III (R = H, X = S, NMe). Cyclizing
 II
 (R = CH₂Ph, R₁ = NHMe, n = 2) using pyridine-HCl gave pyridoquinoline IV.
 Hydrolysis of II (R = Ph, Me, R₁ = NHMe, n = 1; R = CH₂Ph, R₁ = NHMe, n =
 2) gave quinolinone V (R₃ = NHPh), 2-MeNHC₆H₄COCH(CO₂H)(CH₂)₂NHMe, or V

L7 ANSWER 164 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)
 (R₃ = CH₂NHCH₂Ph), resp., which can be cyclized to III (R = Ph, Me, X =
 NMe) or VI, resp. Dehydrogenation of III (R = Ph, X = S, NMe) with DDQ
 gave the corresponding pyrroles.
 IT 88264-01-1P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation of)
 RN 88264-01-1 CAPLUS
 CN 4H-Pyrrolo[3,2-c]quinolin-4-one, 1,5-dihydro-5-methyl-1-phenyl- (9CI)
 (CA INDEX NAME)

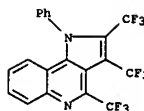


L7 ANSWER 165 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 1983:594379 CAPLUS
 DN 99:194379
 TI Reaction of tetrafluoroethylene oligomer. Reactions of tetramer and
 pentamer of tetrafluoroethylene with aromatic amines
 AU Chen, Lifu; Wu, Jinlong; Wang, Junhuan
 CS Shanghai Inst. Org. Chem., Acad. Sin., Shanghai, Peop. Rep. China
 SO Huaxue Xuebao (1983), 41(7), 668-71
 CODEN: HHMPA4; ISSN: 0567-7351
 DT Journal
 LA Chinese
 OS CASREACT 99:194379
 GI

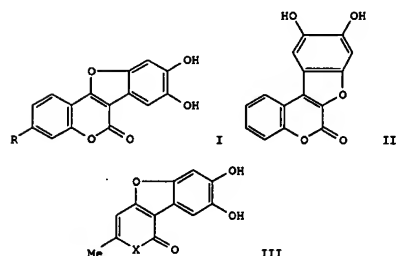


AB Condensation reactions of F₃CCF₂C(CF₃):C(CF₃)CF₂CF₃ (I) and
 (F₃CCF₂)₂C(CF₃)C(CF₃):CF₂CF₃ (II) with aromatic amines were studied. I
 reacted with RNH₂ (III, R = Ph) in 1:1 molar ratio to give
 PhN:CFC(CF₂CF₃):C(CF₃)CF₂CF₃ (IV), PhN:C(CF₃)C(CF₂NPh):C(CF₃)CF₂CF₃ (V),
 and a small quantity of VI and, in 1:2 molar ratio, mainly V and VI and a
 small quantity of IV and VII. However, in 1:3 molar ratio, only V and VI
 were obtained. II reacted with III (R = Ph) in Et₂O to
 give (F₃CCF₂)₂C(CF₃)C(CF₂CF₃):C:C:NR (VIII, R = Ph),
 (F₃CCF₂)₂C(CF₃)C(:C:NPh)C(:NPh)CF₃, (F₃CCF₂)₂C(CF₃)CH₂C(:NR)NHR (IX, R =
 Ph) and (F₃CCF₂)₂C(CF₃)CH₂CONHPh, whereas II reacted with III [R =
 2-naphthyl (Q)] in 1:1 molar ratio in DMF at 100-110° to give VIII
 (R = Q), IX (R = Q), CF₃CONHQ, and X.
 IT 87658-40-0P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation of)
 RN 87658-40-0 CAPLUS
 CN 1H-Pyrrolo[3,2-c]quinoline, 1-phenyl-2,3,4-tris(trifluoromethyl)- (9CI)
 (CA INDEX NAME)

L7 ANSWER 165 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



L7 ANSWER 166 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 1983:505152 CAPLUS
 DN 99:105152
 TI Electrochemical synthesis of heterocyclic compounds. XII. Anodic oxidation of catechol in the presence of nucleophiles
 AU Tabakovic, Ibro; Grujic, Zdravko; Bejtovic, Zlatko
 CS Fac. Technol., "Djuro Pucar Stari" Univ., Banjaluka, 78000, Yugoslavia
 SO Journal of Heterocyclic Chemistry (1983), 20(3), 635-8
 CODEN: JHTCAD; ISSN: 0022-152X
 DT Journal
 LA English
 GI

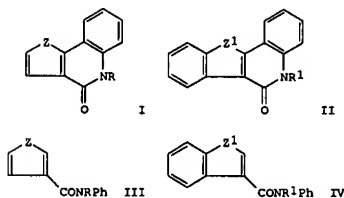


AB The electrochem. synthesis of coumestan derivs. I (R = H, HO, Br) and some related heterocyclics, i.e. II and III (X = O, NH), by anodic oxidation of catechol in the presence of various nucleophiles is described. The mechanism of oxidation was deduced from voltammetric data and by coulometry at controlled potential. Thus, anodic oxidation of 4-hydroxycoumarin and catechol in aqueous NaOAc at 1.1 V gave 95% I (R = H).
 IT 86896-57-3P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation of, by anodic oxidation-cyclization reactions of catechol)
 RN 86896-57-3 CAPLUS
 CN Benzofuro[3,2-c]quinolin-6(5H)-one, 8,9-dihydroxy- (9CI) (CA INDEX NAME)

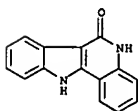
L7 ANSWER 167 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 1983:143394 CAPLUS
 DN 98:143394
 TI Quinolone derivatives
 PA Mitsubishi Chemical Industries Co., Ltd., Japan
 SO Jpn. Kokai Tokkyo Koho, 3 pp.
 CODEN: JKKXAF
 DT Patent
 LA Japanese
 FAN CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 57146774	A2	19820910	JP 1981-33452	19810309
JP 02017556	B4	19900420		
JP 1981-33452		19810309		

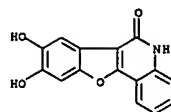
PRAI JP 1981-33452
 OS CASREACT 98:143394
 GI



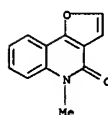
AB Quinolones I (R, Z = Me, NH; Me, O; Me, S) and II (R1, Z1 = H, NH; Me, NH; Me, NMe; Me, O; Me, S) were prepared by photol. of III and IV, resp., in the presence of iodine as oxidant. Thus, photol. of III (Z = NH, R = Me) 10 h in EtOH-C6H6 (1:1) containing iodine gave 38% I (R = Me, Z = NH).
 IT 18735-98-3P 67735-57-3P 76870-56-9P
 85149-46-8P 85149-47-9P 85149-48-0P
 85149-49-1P 85157-98-8P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation of)
 RN 18735-98-3 CAPLUS
 CN 6H-Indolo[3,2-c]quinolin-6-one, 5,11-dihydro- (8CI, 9CI) (CA INDEX NAME)



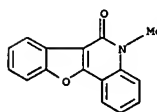
L7 ANSWER 166 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



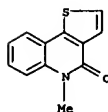
L7 ANSWER 167 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)
 RN 67735-57-3 CAPLUS
 CN Furo[3,2-c]quinolin-4(5H)-one, 5-methyl- (6CI, 9CI) (CA INDEX NAME)



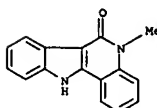
RN 76870-56-9 CAPLUS
 CN Benzofuro[3,2-c]quinolin-6(5H)-one, 5-methyl- (9CI) (CA INDEX NAME)



RN 85149-46-8 CAPLUS
 CN Thieno[3,2-c]quinolin-4(5H)-one, 5-methyl- (9CI) (CA INDEX NAME)

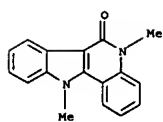


RN 85149-47-9 CAPLUS
 CN 6H-Indolo[3,2-c]quinolin-6-one, 5,11-dihydro-5-methyl- (9CI) (CA INDEX NAME)

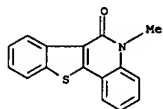


RN 85149-48-0 CAPLUS
 CN 6H-Indolo[3,2-c]quinolin-6-one, 5,11-dihydro-5,11-dimethyl- (9CI) (CA INDEX NAME)

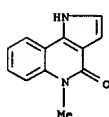
L7 ANSWER 167 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



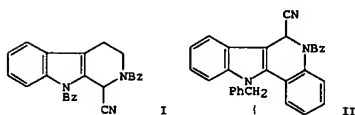
RN 85149-49-1 CAPLUS
CN [1]Benzothieno[3,2-c]quinolin-6(5H)-one, 5-methyl- (9CI) (CA INDEX NAME)



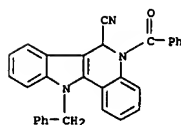
RN 85157-98-8 CAPLUS
CN 4H-Pyrrolo[3,2-c]quinolin-4-one, 1,5-dihydro-5-methyl- (9CI) (CA INDEX NAME)



L7 ANSWER 169 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN
AN 1981:619983 CAPLUS
DN 95:219983
TI Reissert compound studies. XLII. Synthesis and reactions of the 3,4-dihydro- β -carboline Reissert compound and observations on α , β , and γ -carbolines
AU Veeraraghavan, Seshadri; Popp, Frank D.
CS Dep. Chem., Univ. Missouri, Kansas City, MO, 64110, USA
SO Journal of Heterocyclic Chemistry (1981), 18(5), 909-15
CODEN: JHTCAD; ISSN: 0022-152X
PT Journal
LA English
OS CASREACT 95:219983
GI



AB 3,4-Dihydro- β -carboline and benzo[a]- γ -carboline yielded Reissert compds. e.g. I and II, resp. I through its acid- and base-promoted reactions, was found to be a very useful intermediate in the synthesis of several β -carboline derivs. including tetracyclic compds. Reaction of I with dichlorodicyanobenzoquinone resulted in oxidation to 1-cyano- β -carboline. α -, β - and γ -carbolines failed to form Reissert compds. under a wide variety of conditions. 7-Azaindole also failed to yield a Reissert compound
IT 79960-44-4P 79979-37-6P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)
RN 79960-44-4 CAPLUS
CN 5H-Indolo[3,2-c]quinoline-6-carbonitrile, 5-benzoyl-6,11-dihydro-11-(phenylmethyl)- (9CI) (CA INDEX NAME)

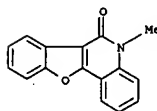


RN 79979-37-6 CAPLUS
CN 5H-Indolo[3,2-c]quinoline-6-carbonitrile, 5-[2-(chloromethyl)benzoyl]-6,11-

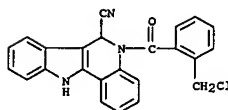
L7 ANSWER 168 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN
AN 1982:85539 CAPLUS
DN 96:85539
TI Dihydrobenzofurans
PA Kaneoka, Yuichi, Japan
SO Jpn. Kokai Tokkyo Koho, 7 pp.
CODEN: JOKXAF
DT Patent
LA Japanese
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 56125388	A2	19811001	JP 1980-29570	19800308
JP 1980-29570	A	19800308		

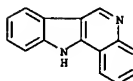
OS CASREACT 96:85539
GI For diagram(s), see printed CA Issue.
AB Dihydrobenzofurans I (Z = Q, Q1; R = alkyl) were prepared by photocyclization of benzofurancarboxylic acid anilides. Thus, irradiating II in MeCN with a Hg lamp gave 66% trans-I (Z = Q, R = Me).
IT 76870-56-9P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)
RN 76870-56-9 CAPLUS
CN Benzofuro[3,2-c]quinolin-6(5H)-one, 5-methyl- (9CI) (CA INDEX NAME)



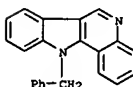
L7 ANSWER 169 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)
dihydro- (9CI) (CA INDEX NAME)



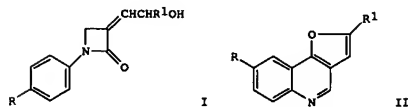
IT 239-09-8
RL: RCT (Reactant); RACT (Reactant or reagent)
(reaction of, with trimethylsilyl cyanide and (chloromethyl)benzoyl chloride)
RN 239-09-8 CAPLUS
CN 11H-Indolo[3,2-c]quinoline (6CI, 7CI, 8CI, 9CI) (CA INDEX NAME)



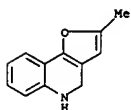
IT 79979-38-7
RL: RCT (Reactant); RACT (Reactant or reagent)
(reaction of, with trimethylsilyl cyanides and benzoyl chloride)
RN 79979-38-7 CAPLUS
CN 11H-Indolo[3,2-c]quinoline, 11-(phenylmethyl)- (9CI) (CA INDEX NAME)



L7 ANSWER 170 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 1981:442950 CAPLUS
 DN 95:42950
 TI Formation of furo[3,2-c]quinoline derivatives through the Fries-type acid-catalysed rearrangement of 1-arylazetidin-2-ones
 AU Kano, Shinzo; Shibuya, Shiroshi; Ebata, Tsutomu
 CS Tokyo Coll. Pharm., Tokyo, 192-03, Japan
 SO Heterocycles (1981), 15(2), 1011-15
 CODEN: HETCYAM; ISSN: 0385-5414
 DT Journal
 LA English
 OS CASREACT 95:42950
 GI

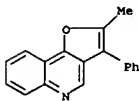


AB Refluxing arylazetidinones I (R = H, MeO; R1 = Me, Et) in F3CCO2H gave 55-60% furoquinolines II along with the corresponding 4,5-dihydro intermediates.
 IT 78225-39-5P 78225-40-8P 78225-41-9P
 RI: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
 (preparation and dehydrogenation of)
 RN 78225-39-5 CAPLUS
 CN Furo[3,2-c]quinoline, 4,5-dihydro-2-methyl- (9CI) (CA INDEX NAME)

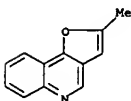


RN 78225-40-8 CAPLUS
 CN Furo[3,2-c]quinoline, 2-ethyl-4,5-dihydro- (9CI) (CA INDEX NAME)

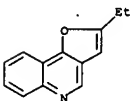
L7 ANSWER 170 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



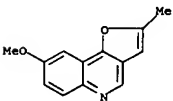
RN 78225-42-0 CAPLUS
 CN Furo[3,2-c]quinoline, 2-methyl- (9CI) (CA INDEX NAME)



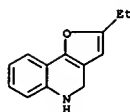
RN 78225-43-1 CAPLUS
 CN Furo[3,2-c]quinoline, 2-ethyl- (9CI) (CA INDEX NAME)



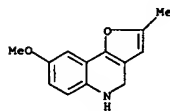
RN 78225-44-2 CAPLUS
 CN Furo[3,2-c]quinoline, 6-methoxy-2-methyl- (9CI) (CA INDEX NAME)



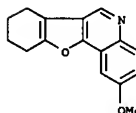
L7 ANSWER 170 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



RN 78225-41-9 CAPLUS
 CN Furo[3,2-c]quinoline, 4,5-dihydro-8-methoxy-2-methyl- (9CI) (CA INDEX NAME)

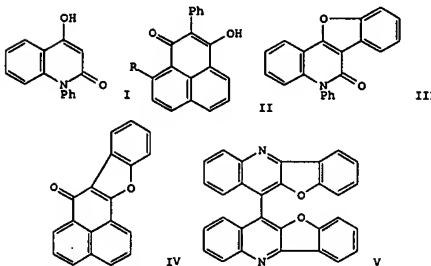


IT 78225-28-2P 78225-32-8P 78225-42-0P
 78225-43-1P 78225-44-2P
 RI: SPN (Synthetic preparation); PREP (Preparation)
 (preparation of)
 RN 78225-28-2 CAPLUS
 CN Benzofuro[3,2-c]quinoline, 7,8,9,10-tetrahydro-2-methoxy- (9CI) (CA INDEX NAME)



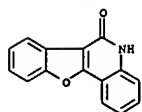
RN 78225-32-8 CAPLUS
 CN Furo[3,2-c]quinoline, 2-methyl-3-phenyl- (9CI) (CA INDEX NAME)

L7 ANSWER 171 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 1981:139531 CAPLUS
 DN 94:139531
 TI Synthesis of benzofurans by cyclodehydrogenation of phenylmalonyl heterocyclics
 AU Stadlbauer, Wolfgang; Schmutz, Otto; Kappe, Thomas
 CS Inst. Org. Chem., Univ. Graz, Graz, A-8010, Austria
 SO Monatshefte fuer Chemie (1980), 111(5), 1005-13
 CODEN: MOCMB7; ISSN: 0026-9247
 DT Journal
 LA German
 OS CASREACT 94:139531
 GI

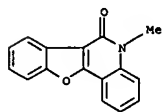


AB Phenylmalonyl heterocyclic compds., e.g. I, benzoquinolizidinones, and the phenalenones II (R = H, OH) can be converted to benzofurans, e.g. III and IV, by cyclodehydrogenation with Pd/C in boiling Ph2O.
 2-Phenylchinchonic acid reacts under the same conditions to the dimeric benzofuroquinoline V, but 2-phenyl-3-quinolinol gives the monomer.
 IT 57046-70-5P 76870-56-2P 76870-57-0P
 76870-58-1P 76870-59-2P
 RI: SPN (Synthetic preparation); PREP (Preparation)
 (preparation of)
 RN 57046-70-5 CAPLUS
 CN Benzofuro[3,2-c]quinolin-6(5H)-one (9CI) (CA INDEX NAME)

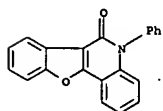
L7 ANSWER 171 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



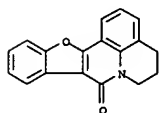
RN 76870-56-9 CAPLUS
 CN Benzo[furo[3,2-c]quinolin-6(5H)-one, 5-methyl- (9CI) (CA INDEX NAME)



RN 76870-57-0 CAPLUS
 CN Benzo[furo[3,2-c]quinolin-6(5H)-one, 5-phenyl- (9CI) (CA INDEX NAME)

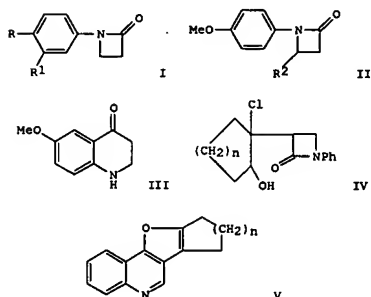


RN 76870-58-1 CAPLUS
 CN 4H,8H-Benzo[i]benzofuro[2,3-b]quinolizin-8-one, 5,6-dihydro- (9CI) (CA INDEX NAME)



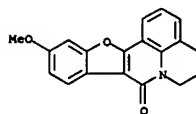
RN 76870-59-2 CAPLUS
 CN 4H,8H-Benzo[i]benzofuro[2,3-b]quinolizin-8-one, 5,6-dihydro-11-methoxy-

L7 ANSWER 172 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 1981:47099 CAPLUS
 DN 94:47099
 TI Formation of 2,3-dihydro-4(1H)-quinolones and related compounds via Fries-type acid-catalyzed rearrangement of 1-arylazetidins-2-ones
 AU Kano, Shinzo; Ebata, Tutomu; Shibuya, Shiroshi
 CS Tokyo Coll. Pharm., Tokyo, 192-03, Japan
 SO Journal of the Chemical Society, Perkin Transactions 1: Organic and Bio-Organic Chemistry (1972-1999) (1980), (10), 2105-11
 CODEN: JCPRB4; ISSN: 0300-922X
 DT Journal
 LA English
 OS CASREACT 94:47099
 GI

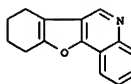


AB 1-Arylazetidins-2-ones I (R, R₁ = H, OMe, Cl, Br, Me, NMe₂, OCH₂Ph) and the 4-substituted azetidins-2-ones II (R₂ = Me, Ph, pyridinyl, piperidinyl) were prepared and treated with refluxing F₃CCO₂H, MeSO₃H at 100°, or concentrated H₂SO₄ to give the corresponding 2,3-dihydro-4(1H)-quinolones (III) through acyl migration and N-CO fission. The 3-substituted azetidinones IV (n = 2, 3) gave the corresponding furo[3,2-c]quinolines V. Thus, p-MeOC₆H₄NH(CH₂)₂CO₂Et was cyclized to I (R = OMe, R₁ = H) which was refluxed in F₃CCO₂H to give 95% quinolone III.
 IT 76228-19-89 76228-20-19
 RL: SPN (Synthetic preparation); PREP (Preparation) (preparation of)
 RN 76228-19-8 CAPLUS
 CN Benzo[furo[3,2-c]quinoline, 7,8,9,10-tetrahydro- (9CI) (CA INDEX NAME)

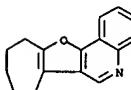
L7 ANSWER 171 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



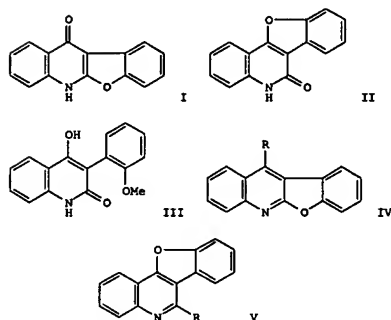
L7 ANSWER 172 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



RN 76228-20-1 CAPLUS
 CN 7H-Cyclohepta[4,5]furo[3,2-c]quinoline, 8,9,10,11-tetrahydro- (9CI) (CA INDEX NAME)

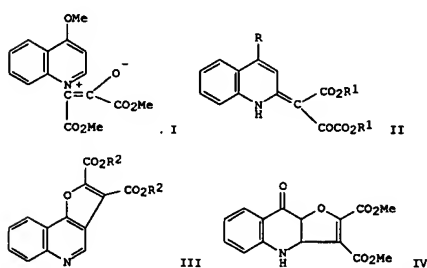


L7 ANSWER 173 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 1980:586123 CAPLUS
 DN 93:186123
 TI The synthesis of benzofuroquinolines. II. Two benzofuroquinolinones and some benzofuroquinoline derivatives
 AU Kawase, Yoshiyuki; Yamaguchi, Seiji; Morita, Mariko; Ueagui, Taeko
 CS Fac. Sci., Toyama Univ., Toyama, 930, Japan
 SO Bulletin of the Chemical Society of Japan (1980), 53(4), 1057-60
 CODEN: BCSJAS; ISSN: 0009-2673
 DT Journal
 LA English
 OS CASREACT 93:186123
 GI



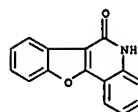
AB Two benzofuroquinolinones, I and II, were obtained by the demethyl-cyclization of III. The chlorination of I and II gave the corresponding IV and V (R = Cl) which were then converted to the cyanobenzofuroquinolines IV and V (R = CN). IV (R = Cl) was converted to 11-methoxy- and 11-ethoxybenzofuro[2,3-b]quinolines IV (R = OMe, OEt) and IV (R = CN) to IV (R = CO₂H, CONH₂). The linear benzofuroquinolines thus obtained were oxidized to the corresponding N-oxides.
 IT 57046-70-5P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
 (preparation and chlorination of)
 RN 57046-70-5 CAPLUS
 CN Benzofuro[3,2-c]quinolin-6(5H)-one (9CI) (CA INDEX NAME)

L7 ANSWER 174 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 1980:471502 CAPLUS
 DN 93:71502
 TI The reaction of 4-methoxyquinoline 1-oxide with dimethyl acetylenedicarboxylate
 AU Ishiguro, Yasuhisa; Funakoshi, Kazuhisa; Saeki, Seitaro; Hamana, Masatomo; Ueda, Ikuhiko
 CS Fac. Pharm. Sci., Kyushu Univ., Fukuoka, 812, Japan
 SO Heterocycles (1980), 14(2), 179-84
 CODEN: HTCYAM; ISSN: 0365-5414
 DT Journal
 LA English
 GI

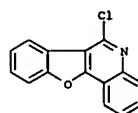


AB Reaction of 4-methoxyquinoline oxide with MeOCC.tplbond.CCO₂Me gave quinolinium ylide I, dihydroquinodine II (R = MeO; R₁ = Me), furoquinoline III (R₂ = Me) and furoquinolinone IV. 4-Chloroquinoline oxide and EtOCC.tplbond.CCO₂Et reacted in refluxing PhMe to give 3.14 II (R = Cl; R₁ = Et) and 3.74 III (R₂ = Et).
 IT 68207-91-0P 74083-60-6P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation of)
 RN 68207-91-0 CAPLUS
 CN Furo[3,2-c]quinoline-2,3-dicarboxylic acid, diethyl ester (9CI) (CA INDEX NAME)

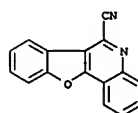
L7 ANSWER 173 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



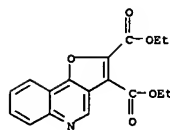
IT 75256-40-5P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
 (preparation and reaction of, with cyanide)
 RN 75256-40-5 CAPLUS
 CN Benzofuro[3,2-c]quinoline, 6-chloro- (9CI) (CA INDEX NAME)



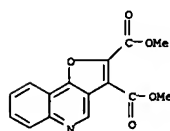
IT 75256-42-7P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation of)
 RN 75256-42-7 CAPLUS
 CN Benzofuro[3,2-c]quinoline-6-carbonitrile (9CI) (CA INDEX NAME)



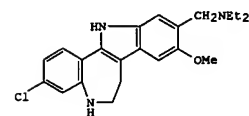
L7 ANSWER 174 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



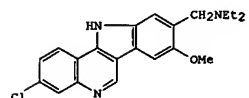
RN 74083-60-6 CAPLUS
 CN Furo[3,2-c]quinoline-2,3-dicarboxylic acid, dimethyl ester (9CI) (CA INDEX NAME)



L7 ANSWER 175 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 1980:400390 CAPLUS
 DN 93:390
 TI Binding to deoxyribonucleic acid of an indolobenzazepine analog of the
 antimalarial drug amodiaquine
 AU Montgomerie, Anita M.; Proctor, George R.; Green, Brian
 CS Dep. Chem., Univ. Strathclyde, Glasgow, G4 0NR, UK
 SO Biochemical Society Transactions (1979), 7(6), 1251-3
 CODEN: BCSTB5; ISSN: 0300-5127
 DT Journal
 LA English
 GI



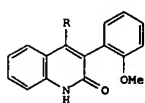
I



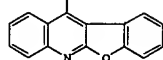
II

AB Binding of the amodiaquine analog I [73660-90-9] to DNA occurred with moderately high affinity ($K = 2 \times 10^5/M$) at low ionic strength (0.01M NaCl), but was greatly diminished in 0.2M NaCl. Denaturation was unfavorable for DNA-I binding, which depended strongly on the proportion of A.T base pairs in the polymer. In contrast, II [34374-22-6] bound strongly to DNA ($K = 2 \times 10^5/M$) in the presence of 0.2M NaCl, again preferring native DNA. Thus, I probably binds externally to DNA with A.T specificity, unlike the planar II which may bind via intercalation.
 IT 34374-22-6
 RL: BIOL (Biological study)
 (DNA binding of, mechanism of)
 RN 34374-22-6 CAPLUS
 CN 11H-Indolo[3,2-c]quinoline-9-methanamine, 3-chloro-N,N-diethyl-8-methoxy- (9CI) (CA INDEX NAME)

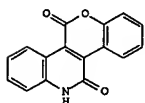
L7 ANSWER 176 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 1979:456869 CAPLUS
 DN 91:56869
 TI The synthesis of benzofuroquinolines. I. Some benzofuro[2,3-b]quinoline and benzofuro[3,2-c]quinoline derivatives
 AU Kawase, Yoshiyuki; Yamaguchi, Seiji; Maeda, Osamu; Hayashi, Akemi; Hayashi, Ichihiko; Tabata, Kazuko; Kondo, Masako
 CS Fac. Sci., Toyama Univ., Toyama, 930, Japan
 SO Journal of Heterocyclic Chemistry (1979), 16(3), 487-91
 CODEN: JHTCAD; ISSN: 0022-152X
 DT Journal
 LA English
 OS CASREACT 91:56869
 GI



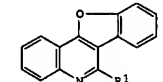
I



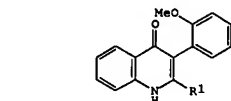
II



III



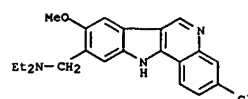
IV



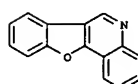
V

AB Demethylation-cyclization of quinolinones I ($R = H, Me$) gave benzofuroquinolines II. The lactone III underwent chlorination followed by treatment with KOH to give II ($R = PhCH_2CH_2$).
 Demethylation-cyclization of I ($R = CO_2H$) gave III. Benzofuro[3,2-c]quinolines IV ($R_1 = H, Me$) were prepared by demethylation-cyclization of quinolinones V. Condensation of BzH with II ($R = Me$) and IV ($R_1 = Me$) followed by KMnO₄ oxidation of II ($R = CH_2CHPh$) and IV ($R_1 = CH_2CHPh$) gave II ($R = CO_2H$) and IV ($R_1 = CO_2H$). Oxidation of II ($R = H, Me, CO_2H$) and IV ($R_1 = H, Me$) via AcOOH or CF₃CO₂H gave the resp. N-oxides.
 IT 57305-59-6P 70751-33-6P 70751-40-5P
 70751-41-6P 70751-43-8P
 RL: SPN (Synthetic preparation); PREP (Preparation)

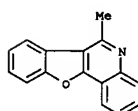
L7 ANSWER 175 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



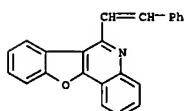
L7 ANSWER 176 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)
 (prepn. of)
 RN 57305-59-6 CAPLUS
 CN Benzofuro[3,2-c]quinoline (9CI) (CA INDEX NAME)



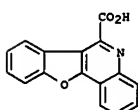
RN 70751-33-6 CAPLUS
 CN Benzofuro[3,2-c]quinoline, 6-methyl- (9CI) (CA INDEX NAME)



RN 70751-40-5 CAPLUS
 CN Benzofuro[3,2-c]quinoline, 6-(2-phenylethenyl)- (9CI) (CA INDEX NAME)

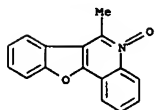


RN 70751-41-6 CAPLUS
 CN Benzofuro[3,2-c]quinoline-6-carboxylic acid (9CI) (CA INDEX NAME)

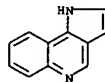


RN 70751-43-8 CAPLUS
 CN Benzofuro[3,2-c]quinoline, 6-methyl-, 5-oxide (9CI) (CA INDEX NAME)

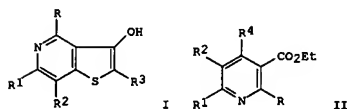
L7 ANSWER 176 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



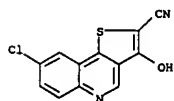
L7 ANSWER 177 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 1979:456858 CAPLUS
 DN 91:56858
 TI Pyrroloquinolines. V. 1H-Pyrrolo[3,2-c]quinolines
 AU Khan, Misbahul Ain; Ferreira da Rocha, Joao
 CS Sec. Quim., Inst. Mil. Eng., Rio de Janeiro, 22290, Brazil
 SO Heterocycles (1979), 12(6), 857-70
 CODEN: HTCYAM; ISSN: 0385-5414
 DT Journal; General Review
 LA English
 AB Review with 20 refs.
 IT 233-38-5D, derivative
 RL: RCT (Reactant); RACT (Reactant or reagent))
 RN 233-38-5 CAPLUS
 CN 1H-Pyrrolo[3,2-c]quinoline (8CI, 9CI) (CA INDEX NAME)



L7 ANSWER 178 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 1979:203909 CAPLUS
 DN 90:203909
 TI Heterocycles by annelation to 4-pyridinols. II. Thieno[3,2-c]pyridin-3-ols
 AU Hoerlein, Gerhard; Kuebel, Boerries; Studeneer, Adolf; Salbeck, Gerhard
 CS Hoechst A.-G., Frankfurt/Main, Fed. Rep. Ger.
 SO Liebigs Annalen der Chemie (1979), (3), 387-91
 CODEN: LACHDL; ISSN: 0170-2041
 DT Journal
 LA German
 OS CASREACT 90:203909
 GI



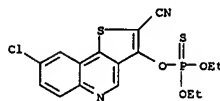
AB Thienopyridinols I (R = H, Me; R1 = Me; R2 = H, Cl, CN, NO2; R1R2 = CH:CClCH:CH; R3 = CO2Et, CN) were prepared by chlorinating the pyridinols II (R4 = OH), thiolating II (R4 = Cl), in cyclizing II (R4 = SH) with ClCH2CN, or by cyclizing II (R4 = Cl) with HSCCH2CO2Et. I were converted to their dimethylcarbamates.
 IT 70271-91-9P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
 (preparation and reaction of, with diethoxythiolphosphoryl chloride)
 RN 70271-91-9 CAPLUS
 CN Thieno[3,2-c]quinoline-2-carbonitrile, 8-chloro-3-hydroxy-, potassium salt
 (9CI) (CA INDEX NAME)



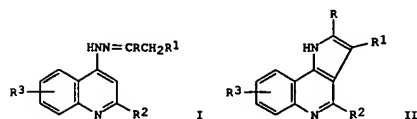
● K

IT 70271-92-0P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation of)
 RN 70271-92-0 CAPLUS
 CN Phosphorothioic acid, O-(8-chloro-2-cyanothieno[3,2-c]quinolin-3-yl)

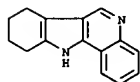
L7 ANSWER 178 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)
 O,O-diethyl ester (9CI) (CA INDEX NAME)



L7 ANSWER 179 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 1979:6274 CAPLUS
 DN 90:6274
 TI Tricyclic heteroaromatic ring systems. II. A convenient synthesis of 1H-pyrrolo[3,2-c]quinolines
 AU Khan, Mubashul Ain; Ferreira de Rocha, Joao
 CS Sec. Quim., Inst. M.L. Eng., Rio de Janeiro, Brazil
 SO Journal of Heterocyclic Chemistry (1978), 15(6), 913-21
 CODEN: JHTCAD; ISSN: 0022-152X
 DT Journal
 LA English
 OS CASREACT 90:6274
 GI

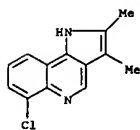


AB Quinol-4-yl hydrazones I (R = H, Me, Et; R1 = Me, Ph, Et; RR1 = (CH2)n, n = 3, 4; R2 = H, Me; R3 = H, 6-, 7-, 8-Cl, 6-, 7-, 8-Me, 6-, 7-, 8-MeO) on heating in high boiling solvents undergo cyclizations to give 1H-pyrrolo[3,2-c]quinolines II in good yields. Some of these I were alkylated to provide their N-alkyl derivs.
 IT 61760-43-8P 68499-86-5P 68499-87-6P
 68499-89-8P 68499-90-1P 68528-44-9P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
 (preparation and alkylation of)
 RN 61760-43-8 CAPLUS
 CN 7H-Indolo[3,2-c]quinoline, 8,9,10,11-tetrahydro- (9CI) (CA INDEX NAME)

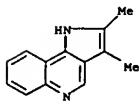


RN 68499-86-5 CAPLUS
 CN 7H-Indolo[3,2-c]quinoline, 4-chloro-8,9,10,11-tetrahydro- (9CI) (CA INDEX NAME)

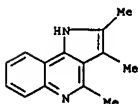
L7 ANSWER 179 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



IT 61760-44-9P 61760-47-2P 61760-48-3P
 68499-85-4P 68499-88-7P 68499-91-2P
 68499-92-3P 68499-93-4P 68499-94-5P
 68499-95-6P 68499-96-7P 68499-97-8P
 68499-98-9P 68499-99-0P 68500-00-3P
 68500-01-6P 68500-02-7P 68500-03-8P
 68500-04-9P 68500-05-0P 68500-06-1P
 68500-07-2P 68500-08-3P 68500-09-4P
 68500-10-7P 68500-11-8P 68500-12-9P
 68500-13-0P 68500-14-1P 68500-15-2P
 68500-16-3P 68500-17-4P 68500-18-5P
 68500-19-6P 68500-20-9P 68500-21-0P
 68500-22-1P 68500-23-2P 68500-24-3P
 68500-25-4P 68500-26-5P 68500-27-6P
 68500-28-7P 68500-29-8P 68500-30-1P
 68528-39-2P 68528-40-5P 68528-41-6P
 68528-42-7P 68528-43-8P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation of)
 RN 61760-44-9 CAPLUS
 CN 1H-Pyrrolo[3,2-c]quinoline, 2,3-dimethyl- (9CI) (CA INDEX NAME)

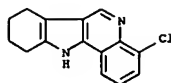


RN 61760-47-2 CAPLUS
 CN 1H-Pyrrolo[3,2-c]quinoline, 2,3,4-trimethyl- (9CI) (CA INDEX NAME)

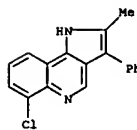


RN 61760-48-3 CAPLUS
 CN 7H-Indolo[3,2-c]quinoline, 8,9,10,11-tetrahydro-6-methyl- (9CI) (CA INDEX NAME)

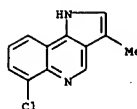
L7 ANSWER 179 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



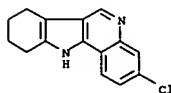
RN 68499-87-6 CAPLUS
 CN 1H-Pyrrolo[3,2-c]quinoline, 6-chloro-2-methyl-3-phenyl- (9CI) (CA INDEX NAME)



RN 68499-89-8 CAPLUS
 CN 1H-Pyrrolo[3,2-c]quinoline, 6-chloro-3-methyl- (9CI) (CA INDEX NAME)

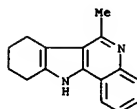


RN 68499-90-1 CAPLUS
 CN 7H-Indolo[3,2-c]quinoline, 3-chloro-8,9,10,11-tetrahydro- (9CI) (CA INDEX NAME)

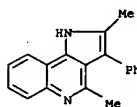


RN 68528-44-9 CAPLUS
 CN 1H-Pyrrolo[3,2-c]quinoline, 6-chloro-2,3-dimethyl- (9CI) (CA INDEX NAME)

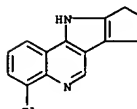
L7 ANSWER 179 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



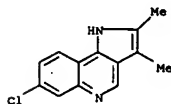
RN 68499-85-4 CAPLUS
 CN 1H-Pyrrolo[3,2-c]quinoline, 2,4-dimethyl-3-phenyl- (9CI) (CA INDEX NAME)



RN 68499-88-7 CAPLUS
 CN Cyclopenta[4,5]pyrrolo[3,2-c]quinoline, 4-chloro-7,8,9,10-tetrahydro- (9CI) (CA INDEX NAME)

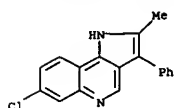


RN 68499-91-2 CAPLUS
 CN 1H-Pyrrolo[3,2-c]quinoline, 7-chloro-2,3-dimethyl- (9CI) (CA INDEX NAME)

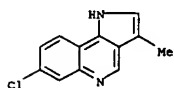


RN 68499-92-3 CAPLUS
 CN 1H-Pyrrolo[3,2-c]quinoline, 7-chloro-2-methyl-3-phenyl- (9CI) (CA INDEX NAME)

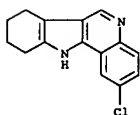
L7 ANSWER 179 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



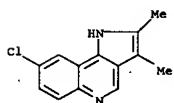
RN 68499-93-4 CAPLUS
CN 1H-Pyrrolo[3,2-c]quinoline, 7-chloro-3-methyl- (9CI) (CA INDEX NAME)



RN 68499-94-5 CAPLUS
CN 7H-Indolo[3,2-c]quinoline, 2-chloro-8,9,10,11-tetrahydro- (9CI) (CA INDEX NAME)

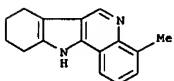


RN 68499-95-6 CAPLUS
CN 1H-Pyrrolo[3,2-c]quinoline, 8-chloro-2,3-dimethyl- (9CI) (CA INDEX NAME)

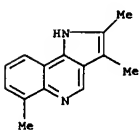


RN 68499-96-7 CAPLUS
CN 1H-Pyrrolo[3,2-c]quinoline, 8-chloro-2-methyl-3-phenyl- (9CI) (CA INDEX NAME)

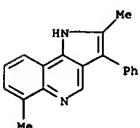
L7 ANSWER 179 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



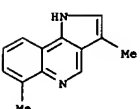
RN 68500-01-6 CAPLUS
CN 1H-Pyrrolo[3,2-c]quinoline, 2,3,6-trimethyl- (9CI) (CA INDEX NAME)



RN 68500-02-7 CAPLUS
CN 1H-Pyrrolo[3,2-c]quinoline, 2,6-dimethyl-3-phenyl- (9CI) (CA INDEX NAME)

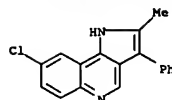


RN 68500-03-8 CAPLUS
CN 1H-Pyrrolo[3,2-c]quinoline, 3,6-dimethyl- (9CI) (CA INDEX NAME)

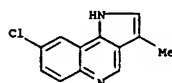


RN 68500-04-9 CAPLUS
CN 7H-Indolo[3,2-c]quinoline, 8,9,10,11-tetrahydro-3-methyl- (9CI) (CA INDEX NAME)

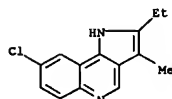
L7 ANSWER 179 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



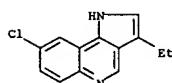
RN 68499-97-8 CAPLUS
CN 1H-Pyrrolo[3,2-c]quinoline, 8-chloro-3-methyl- (9CI) (CA INDEX NAME)



RN 68499-98-9 CAPLUS
CN 1H-Pyrrolo[3,2-c]quinoline, 8-chloro-2-ethyl-3-methyl- (9CI) (CA INDEX NAME)

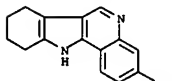


RN 68499-99-0 CAPLUS
CN 1H-Pyrrolo[3,2-c]quinoline, 8-chloro-3-ethyl- (9CI) (CA INDEX NAME)

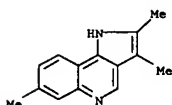


RN 68500-00-5 CAPLUS
CN 7H-Indolo[3,2-c]quinoline, 8,9,10,11-tetrahydro-4-methyl- (9CI) (CA INDEX NAME)

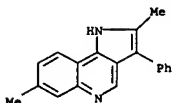
L7 ANSWER 179 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



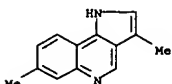
RN 68500-05-0 CAPLUS
CN 1H-Pyrrolo[3,2-c]quinoline, 2,3,7-trimethyl- (9CI) (CA INDEX NAME)



RN 68500-06-1 CAPLUS
CN 1H-Pyrrolo[3,2-c]quinoline, 2,7-dimethyl-3-phenyl- (9CI) (CA INDEX NAME)

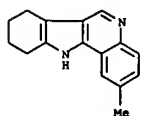


RN 68500-07-2 CAPLUS
CN 1H-Pyrrolo[3,2-c]quinoline, 3,7-dimethyl- (9CI) (CA INDEX NAME)

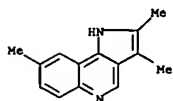


RN 68500-08-3 CAPLUS
CN 7H-Indolo[3,2-c]quinoline, 8,9,10,11-tetrahydro-2-methyl- (9CI) (CA INDEX NAME)

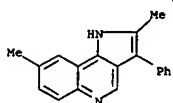
L7 ANSWER 179 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



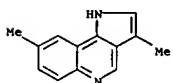
RN 68500-09-4 CAPLUS
CN 1H-Pyrrolo[3,2-c]quinoline, 2,3,8-trimethyl- (9CI) (CA INDEX NAME)



RN 68500-10-7 CAPLUS
CN 1H-Pyrrolo[3,2-c]quinoline, 2,8-dimethyl-3-phenyl- (9CI) (CA INDEX NAME)

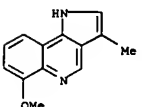


RN 68500-11-8 CAPLUS
CN 1H-Pyrrolo[3,2-c]quinoline, 3,8-dimethyl- (9CI) (CA INDEX NAME)

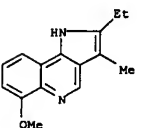


RN 68500-12-9 CAPLUS
CN 1H-Pyrrolo[3,2-c]quinoline, 2-ethyl-3,8-dimethyl- (9CI) (CA INDEX NAME)

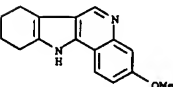
L7 ANSWER 179 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)
CN 1H-Pyrrolo[3,2-c]quinoline, 6-methoxy-3-methyl- (9CI) (CA INDEX NAME)



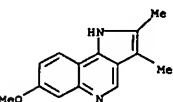
RN 68500-17-4 CAPLUS
CN 1H-Pyrrolo[3,2-c]quinoline, 2-ethyl-6-methoxy-3-methyl- (9CI) (CA INDEX NAME)



RN 68500-18-5 CAPLUS
CN 7H-Indolo[3,2-c]quinoline, 8,9,10,11-tetrahydro-3-methoxy- (9CI) (CA INDEX NAME)

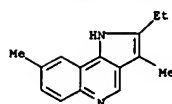


RN 68500-19-6 CAPLUS
CN 1H-Pyrrolo[3,2-c]quinoline, 7-methoxy-2,3-dimethyl- (9CI) (CA INDEX NAME)

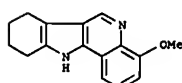


RN 68500-20-9 CAPLUS
CN 1H-Pyrrolo[3,2-c]quinoline, 7-methoxy-2-methyl-3-phenyl- (9CI) (CA INDEX NAME)

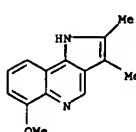
L7 ANSWER 179 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



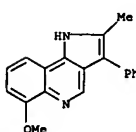
RN 68500-13-0 CAPLUS
CN 7H-Indolo[3,2-c]quinoline, 8,9,10,11-tetrahydro-4-methoxy- (9CI) (CA INDEX NAME)



RN 68500-14-1 CAPLUS
CN 1H-Pyrrolo[3,2-c]quinoline, 6-methoxy-2,3-dimethyl- (9CI) (CA INDEX NAME)

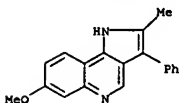


RN 68500-15-2 CAPLUS
CN 1H-Pyrrolo[3,2-c]quinoline, 6-methoxy-2-methyl-3-phenyl- (9CI) (CA INDEX NAME)

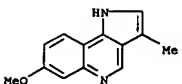


RN 68500-16-3 CAPLUS

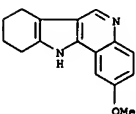
L7 ANSWER 179 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



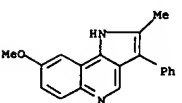
RN 68500-21-0 CAPLUS
CN 1H-Pyrrolo[3,2-c]quinoline, 7-methoxy-3-methyl- (9CI) (CA INDEX NAME)



RN 68500-22-1 CAPLUS
CN 7H-Indolo[3,2-c]quinoline, 8,9,10,11-tetrahydro-2-methoxy- (9CI) (CA INDEX NAME)

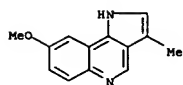


RN 68500-23-2 CAPLUS
CN 1H-Pyrrolo[3,2-c]quinoline, 8-methoxy-2-methyl-3-phenyl- (9CI) (CA INDEX NAME)

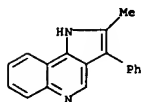


RN 68500-24-3 CAPLUS
CN 1H-Pyrrolo[3,2-c]quinoline, 8-methoxy-3-methyl- (9CI) (CA INDEX NAME)

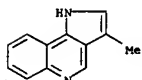
L7 ANSWER 179 OF 273 CAPLUS COPYRIGHT 2005 ACS ON STN (Continued)



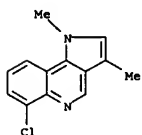
RN 68500-25-4 CAPLUS
CN 1H-Pyrrolo[3,2-c]quinoline, 2-methyl-3-phenyl- (9CI) (CA INDEX NAME)



RN 68500-26-5 CAPLUS
CN 1H-Pyrrolo[3,2-c]quinoline, 3-methyl- (9CI) (CA INDEX NAME)



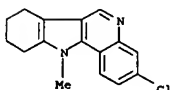
RN 68500-27-6 CAPLUS
CN 1H-Pyrrolo[3,2-c]quinoline, 6-chloro-1,3-dimethyl- (9CI) (CA INDEX NAME)



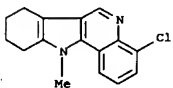
RN 68500-28-7 CAPLUS
CN 1H-Pyrrolo[3,2-c]quinoline, 6-chloro-1,2,3-trimethyl- (9CI) (CA INDEX NAME)

L7 ANSWER 179 OF 273 CAPLUS COPYRIGHT 2005 ACS ON STN (Continued)

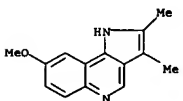
RN 68528-40-5 CAPLUS
CN 7H-Indolo[3,2-c]quinoline, 3-chloro-8,9,10,11-tetrahydro-11-methyl- (9CI) (CA INDEX NAME)



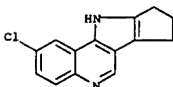
RN 68528-41-6 CAPLUS
CN 7H-Indolo[3,2-c]quinoline, 4-chloro-8,9,10,11-tetrahydro-11-methyl- (9CI) (CA INDEX NAME)



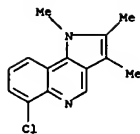
RN 68528-42-7 CAPLUS
CN 1H-Pyrrolo[3,2-c]quinoline, 8-methoxy-2,3-dimethyl- (9CI) (CA INDEX NAME)



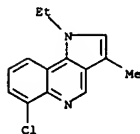
RN 68528-43-8 CAPLUS
CN Cyclopenta[4,5]pyrrolo[3,2-c]quinoline, 2-chloro-6,7,8,9-tetrahydro- (9CI) (CA INDEX NAME)



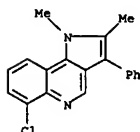
L7 ANSWER 179 OF 273 CAPLUS COPYRIGHT 2005 ACS ON STN (Continued)



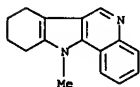
RN 68500-29-8 CAPLUS
CN 1H-Pyrrolo[3,2-c]quinoline, 6-chloro-1-ethyl-3-methyl- (9CI) (CA INDEX NAME)



RN 68500-30-1 CAPLUS
CN 1H-Pyrrolo[3,2-c]quinoline, 6-chloro-1,2-dimethyl-3-phenyl- (9CI) (CA INDEX NAME)

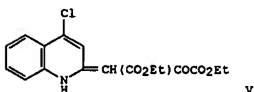
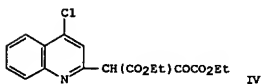


RN 68528-39-2 CAPLUS
CN 7H-Indolo[3,2-c]quinoline, 8,9,10,11-tetrahydro-11-methyl- (9CI) (CA INDEX NAME)



L7 ANSWER 180 OF 273 CAPLUS COPYRIGHT 2005 ACS ON STN

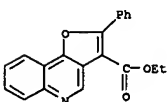
RN 1978:597372 CAPLUS
DN 89:197372
TI The reaction of 4-chloroquinoline 1-oxide with activated acetylenes: furo[3,2-c]quinolines
AU Canonne, Persephone; Lemay, Gilles; Abramovitch, Rudolph A.
CS Dep. Chim., Univ. Laval, Quebec, QC, Can.
SO Heterocycles (1978), 9(9), 1217-22
CODEN: HTCYAM; ISSN: 0385-5414
DT Journal
LA English
OS CASREACT 89:197372
GI



AB The reaction of 4-chloroquinoline 1-oxide (I) with PhC.tpbond.CCO2Et in C6H6 gave 4.5% Et 2-(4-chloro-3-quinolyl)-3-hydroxy-3-phenyl-2-propenoate (II) and 8% Et 4-chloro-2-quinolylbenzoylacetate (III), whereas in PhMe 1.7% II, 7% III, and 6.2% Et 2-phenylfuro[3,2-c]quinoline-3-carboxylate was obtained. I reacted with EtO2CC.tpbond.CCO2Et to give 3.1% IV and V in 1:1 ratio together with 3.7% di-Et furo[3,2-c]quinoline-2,3-dicarboxylate.

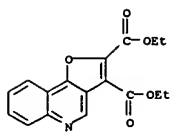
IT 68207-88-5P 68207-91-0P
RL: SPN (Synthetic preparation); PREP (Preparation) (preparation of)

RN 68207-88-5 CAPLUS
CN Furo[3,2-c]quinoline-3-carboxylic acid, 2-phenyl-, ethyl ester (9CI) (CA INDEX NAME)

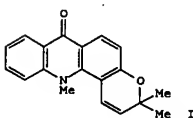


RN 68207-91-0 CAPLUS
CN Furo[3,2-c]quinoline-2,3-dicarboxylic acid, diethyl ester (9CI) (CA INDEX NAME)

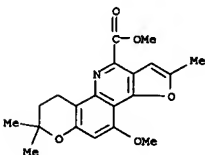
L7 ANSWER 180 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



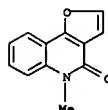
L7 ANSWER 182 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 1978:191184 CAPLUS
 DN 88:191184
 TI A flexible and regioselective acronycine synthesis
 AU Bleichert, Siegfried; Fichter, Karl Ernst; Winterfeldt, Ekkehard
 CS Org.-Chem. Inst., Tech. Univ. Hannover, Hannover, Fed. Rep. Ger.
 SO Chemische Berichte (1978), 111(2), 439-50
 CODEN: CHBEAM; ISSN: 0009-2940
 DT Journal
 LA German
 GI



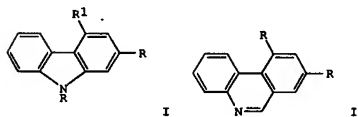
AB A regioselective total synthesis of acronycine (I) in 10 steps from 7-methoxy-2,2-dimethylchromanone was described. The intermediates described, and their analogs, should open pathways to I metabolites.
 IT 66385-21-SP
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation of)
 RN 66385-21-5 CAPLUS
 CN 2H-Furo[3,2-c]pyrano[2,3-h]quinoline-6-carboxylic acid, 3,4-dihydro-10-methoxy-2,2,8-trimethyl-, methyl ester (9CI) (CA INDEX NAME)



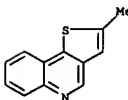
L7 ANSWER 181 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 1978:562745 CAPLUS
 DN 89:162745
 TI Photocyclization of heterocyclic acylanilides
 AU Ninomiya, Ichiya; Kiguchi, Toshiko; Naito, Takeaki
 CS Kobe Women's Coll. Pharm., Kobe, Japan
 SO Heterocycles (1978), 9(8), 1023-9
 CODEN: HTCYAM; ISSN: 0385-5414
 DT Journal
 LA English
 OS CASREACT 89:162745
 GI For diagram(s), see printed CA Issue.
 AB The photocyclization products of acylanilides I, II, III, and IV depended on the nature of the heterocycle and on R. I (R = H) gave V under oxidative conditions and a mixture of VI and VII under nonoxidative conditions. The reactions involved the cyclization of the excited anilide to a common intermediate which gave the oxidized and nonoxidized products.
 IT 67735-57-3P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation of)
 RN 67735-57-3 CAPLUS
 CN Furo[3,2-c]quinolin-4(5H)-one, 5-methyl- (6CI, 9CI) (CA INDEX NAME)



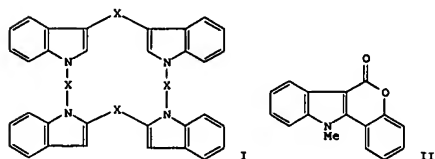
L7 ANSWER 183 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 1978:104342 CAPLUS
 DN 88:104342
 TI Competitive cyclizations of singlet and triplet nitrenes. Part 5. Mechanism of cyclization of 2-nitrenobiphenyls and related systems
 AU Lindley, John M.; McRobbie, Ian M.; Meth-Cohn, Otto; Suschitzky, Hans
 CS Dep. Chem. Appl. Chem., Univ. Salford, Salford, UK
 SO Journal of the Chemical Society, Perkin Transactions 1: Organic and Bio-Organic Chemistry (1972-1999) (1977), (19), 2194-204
 CODEN: JCPRB4; ISSN: 0300-922X
 DT Journal
 LA English
 GI



AB 2-Methyl-1'-nitrenobiphenyl gave 4-methylcarbazole (I; R = H, R1 = Me) in high yields under singlet promoting conditions, but phenanthridine (II; R = H) was the major product under triplet promoting conditions (PhCOME sensitized photolysis). The yield of II (R = H) increased with increasing temperature. Thermolysis of 2,4,6-trimethyl-2'-nitrenobiphenyl (>300°) gave I (R = R1 = Me) and II (R = Me). These results allowed the photochem. conversion of 2-azidobiphenyl into I (R = R1 = H) to be explained in terms of concerted cyclization of a singlet nitrene intermediate. Cyclization of 2-(2-azidophenyl)-3,5-dimethylthiophene gave 2-methylthieno[3,2-c]quinoline.
 IT 22971-31-9P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation of)
 RN 22971-31-9 CAPLUS
 CN Thieno[3,2-c]quinoline, 2-methyl- (8CI, 9CI) (CA INDEX NAME)

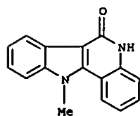


L7 ANSWER 184 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 1978:89465 CAPLUS
 DN 88:89465
 TI The reaction of indole and the indole Grignard reagent with phosgene. A facile synthesis of indole-3-carboxylic acid derivatives
 AU Bergman, Jan; Carlsson, Rene; Sjöberg, Birger
 CS Dep. Org. Chem., R. Inst. Technol., Stockholm, Swed.
 SO Journal of Heterocyclic Chemistry (1977), 14(7), 1123-34
 CODEN: JHTCAD; ISSN: 0022-152X
 DT Journal
 LA English
 OS CASREACT 88:89465
 GI



AB Indole-3-carboxylic and indole-3-glyoxylic acid derivs. were prepared from indoles or oxindoles and phosgene or oxalyl chloride. In this reaction, the indole Grignard reagent gave several products, including the cyclotetramers I (X = CO, COCO). Indole-fused heterocycles were also prepared by this reaction. Thus, phosgene and 2-(2-hydroxyphenyl)-N-methylindole gave 5,6-dihydro-11-methyl-6-oxobenzo[a]pyrano[4,3-b]indole (II).

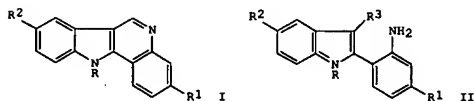
IT 59050-44-1P
 RI: SPN (Synthetic preparation); PREP (Preparation)
 (preparation of)
 RN 59050-44-1 CAPLUS
 CN 6H-Indolo[3,2-c]quinolin-6-one, 5,11-dihydro-11-methyl- (9CI) (CA INDEX NAME)



L7 ANSWER 185 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 1978:50832 CAPLUS
 DN 88:50832
 TI Therapeutic use of indolo-[3,2-c]quinoline
 IN Demarne, Henri
 PA CM Industries, Fr.
 SO Fr. Demande, 24 pp.
 CODEN: FRXXBL
 DT Patent
 LA French
 FAN. CNT 1

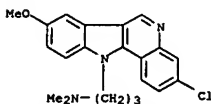
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI FR 2327783	A1	19770513	FR 1975-31703	19751016
<-- FR 2327783	B1	19790914		
PRAI FR 1975-31703	A	19751016		

GI



AB The indoloquinolines I [R = Me2N(CH2)n, (n = 2,3) Et2N(CH2)2; R1 = H, Cl; R2 = H, MeO] were prepared from II (R3 = CHO) via cyclization, hydrogenation of the N-oxides of I and then reduction to I. The N-oxides of I are antimalarials.

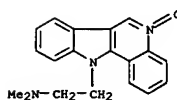
IT 65287-54-1P
 RI: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOI (Biological study); PREP (Preparation); USES (Uses) (preparation and antimalarial activity of)
 RN 65287-54-1 CAPLUS
 CN 11H-Indolo[3,2-c]quinoline-11-propanamine, 3-chloro-8-methoxy-N,N-dimethyl- (9CI) (CA INDEX NAME)



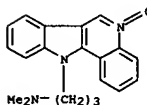
IT 65287-52-7P 65287-53-8P 65287-54-9P
 65287-56-1P 65287-57-2P 65287-58-3P
 65287-59-4P 65352-97-8P
 RI: SPN (Synthetic preparation); PREP (Preparation)
 (preparation and reduction and antimalarial activity of)

L7 ANSWER 184 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

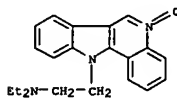
L7 ANSWER 185 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)
 RN 65287-52-7 CAPLUS
 CN 11H-Indolo[3,2-c]quinoline-11-ethanamine, N,N-dimethyl-, 5-oxide (9CI) (CA INDEX NAME)



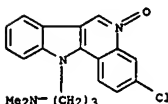
RN 65287-53-8 CAPLUS
 CN 11H-Indolo[3,2-c]quinoline-11-propanamine, N,N-dimethyl-, 5-oxide (9CI) (CA INDEX NAME)



RN 65287-54-9 CAPLUS
 CN 11H-Indolo[3,2-c]quinoline-11-ethanamine, N,N-diethyl-, 5-oxide (9CI) (CA INDEX NAME)

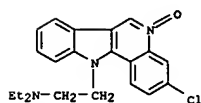


RN 65287-56-1 CAPLUS
 CN 11H-Indolo[3,2-c]quinoline-11-propanamine, 3-chloro-N,N-dimethyl-, 5-oxide (9CI) (CA INDEX NAME)

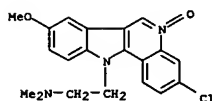


RN 65287-57-2 CAPLUS
 CN 11H-Indolo[3,2-c]quinoline-11-ethanamine, 3-chloro-N,N-diethyl-, 5-oxide

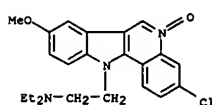
L7 ANSWER 185 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)
(9CI) (CA INDEX NAME)



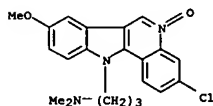
RN 65287-58-3 CAPLUS
CN 11H-Indolo[3,2-c]quinoline-11-ethanamine,
3-chloro-8-methoxy-N,N-dimethyl-
, 5-oxide (9CI) (CA INDEX NAME)



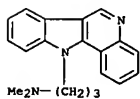
RN 65287-59-4 CAPLUS
CN 11H-Indolo[3,2-c]quinoline-11-ethanamine,
3-chloro-N,N-diethyl-8-methoxy-,
5-oxide (9CI) (CA INDEX NAME)



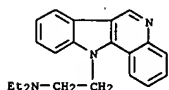
RN 65352-97-8 CAPLUS
CN 11H-Indolo[3,2-c]quinoline-11-propanamine,
3-chloro-8-methoxy-N,N-dimethyl-
, 5-oxide (9CI) (CA INDEX NAME)



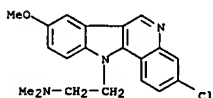
L7 ANSWER 185 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



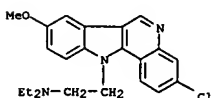
RN 65287-62-9 CAPLUS
CN 11H-Indolo[3,2-c]quinoline-11-ethanamine, N,N-diethyl- (9CI) (CA INDEX NAME)



RN 65287-63-0 CAPLUS
CN 11H-Indolo[3,2-c]quinoline-11-ethanamine,
3-chloro-8-methoxy-N,N-dimethyl-
(9CI) (CA INDEX NAME)



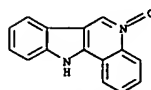
RN 65287-65-2 CAPLUS
CN 11H-Indolo[3,2-c]quinoline-11-ethanamine, 3-chloro-N,N-diethyl-8-methoxy-
(9CI) (CA INDEX NAME)



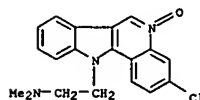
RN 65287-67-4 CAPLUS
CN 11H-Indolo[3,2-c]quinolin-8-ol, 3-chloro-11-[3-(dimethylamino)propyl]-,
5-oxide (9CI) (CA INDEX NAME)

L7 ANSWER 185 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

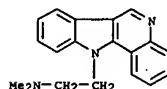
IT 65287-51-6P 65287-55-0P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
(Reactant or reagent)
(preparation and reduction of)
RN 65287-51-6 CAPLUS
CN 11H-Indolo[3,2-c]quinoline, 5-oxide (9CI) (CA INDEX NAME)



RN 65287-55-0 CAPLUS
CN 11H-Indolo[3,2-c]quinoline-11-ethanamine, 3-chloro-N,N-dimethyl-, 5-oxide
(9CI) (CA INDEX NAME)

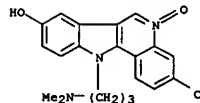


IT 65287-60-7P 65287-61-8P 65287-62-9P
65287-63-0P 65287-65-2P 65287-67-4P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)
RN 65287-60-7 CAPLUS
CN 11H-Indolo[3,2-c]quinoline-11-ethanamine, N,N-dimethyl- (9CI) (CA INDEX NAME)



RN 65287-61-8 CAPLUS
CN 11H-Indolo[3,2-c]quinoline-11-propanamine, N,N-dimethyl- (9CI) (CA INDEX NAME)

L7 ANSWER 185 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



RN 65287-62-9 CAPLUS
CN 11H-Indolo[3,2-c]quinoline-11-ethanamine, N,N-diethyl- (9CI) (CA INDEX NAME)



RN 65287-63-0 CAPLUS
CN 11H-Indolo[3,2-c]quinoline-11-ethanamine,
3-chloro-8-methoxy-N,N-dimethyl-
(9CI) (CA INDEX NAME)

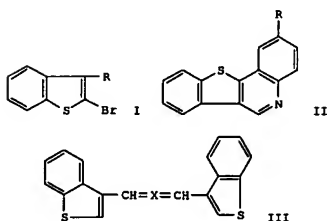


RN 65287-65-2 CAPLUS
CN 11H-Indolo[3,2-c]quinoline-11-ethanamine, 3-chloro-N,N-diethyl-8-methoxy-
(9CI) (CA INDEX NAME)

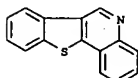


RN 65287-67-4 CAPLUS
CN 11H-Indolo[3,2-c]quinolin-8-ol, 3-chloro-11-[3-(dimethylamino)propyl]-,
5-oxide (9CI) (CA INDEX NAME)

L7 ANSWER 186 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 1977:171165 CAPLUS
 DN 86:171165
 TI Synthesis and reaction behavior of 2-bromo-3-formyl-1-benzothiophene
 AU Weidlein, Richard; Held, Hans
 CS Pharm.-Chem. Inst., Karlsruhe, Karlsruhe, Fed. Rep. Ger.
 SO Synthesis (1977), (1), 65-6
 CODEN: SYNTBF; ISSN: 0039-7881
 DT Journal
 LA German
 GI

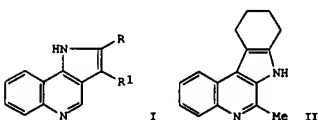


AB The title compound (I, R = CHO) was prepared by brominating I (R = Me) and hydrolyzing I (R = CHBr₂). I (R = CHO) reacted with amines in EtOH in the presence of acid to give I (R = CH:NPh, CH:NC₆H₄Me-4, CH:NC₆H₃(NH₂)NO₂-2,5, CH:NNHPh, CH:NNHC₆H₃(NO₂)2-2,4). Similar action in HOAc overnight gave thienquinolines II (R = H, Me). The dimers III (X = NN, o-NC₆H₄N) were obtained with N₂H₄ and o-(H₂N)2C₆H₄ resp.
 IT 33193-41-8P 62542-55-6P 62542-56-7P
 RL: SPN (Synthetic preparation); PREP (Preparation) (preparation of)
 RN 33193-41-8 CAPLUS
 CN [1]Benzothieno[3,2-c]quinoline (8CI, 9CI) (CA INDEX NAME)

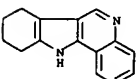


RN 62542-55-6 CAPLUS

L7 ANSWER 187 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 1977:72486 CAPLUS
 DN 86:72486
 TI Convenient routes to pyrrolo[3,2-b]-, pyrrolo[3,2-c]-, and pyrrolo[2,3-c]quinolines, and a study of the pyrolysis of 2-quinolylhydrazones
 AU Parrick, John; Wilcox, Russell
 CS Sch. Chem., Brunel Univ., Uxbridge, UK
 SO Journal of the Chemical Society, Perkin Transactions 1: Organic and Bio-Organic Chemistry (1972-1999) (1976), (19), 2121-5
 CODEN: JCFRB4; ISSN: 0300-922X
 DT Journal
 LA English
 GI

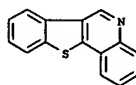


AB 3-Amino-2-methylquinoline with HC(OEt)₃ and an acid catalyst gave 63% 1H-pyrrolo[3,2-b]quinoline. The substituted pyrrolo[3,2-c]quinolines I [R = R₁ = Me, Ph; R₂ = (CH₂)₃, (CH₂)₄] were prepared (70-82%) by refluxing the corresponding 4-quinolylhydrazones in diethylene glycol for 2-7 hr. 3-Hydrazino-2-methylquinoline and a large excess of cyclohexanone with AcOH on heating gave the pyrrolo[2,3-c]quinoline II. Pyrolysis of deoxybenzoin 2-quinolylhydrazone in dry diethylene glycol gave 2-aminoquinoline, 2,3-diphenylimidazo[1,2-a]quinoline (III), and 2,3,4,5-tetraphenylpyrrole. Similar pyrolysis of butan-2-one 2-quinolylhydrazone gave 2-aminoquinoline, 2,2'-azoquinoline (IV), and an aminodiquinolylamine (V). III may be formed by a radical process whereas IV and V may be formed by dimerization of the aminoquinoline and subsequent oxidation or rearrangement.
 IT 61760-43-8P 61760-44-9P 61760-45-0P
 61760-46-1P 61760-47-2P 61760-48-3P
 RL: SPN (Synthetic preparation); PREP (Preparation) (preparation of)
 RN 61760-43-8 CAPLUS
 CN 7H-Indolo[3,2-c]quinoline, 8,9,10,11-tetrahydro- (9CI) (CA INDEX NAME)



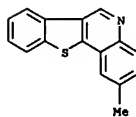
RN 61760-44-9 CAPLUS
 CN 1H-Pyrrolo[3,2-c]quinoline, 2,3-dimethyl- (9CI) (CA INDEX NAME)

L7 ANSWER 186 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)
 CN [1]Benzothieno[3,2-c]quinoline, hydrobromide (9CI) (CA INDEX NAME)



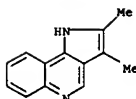
● HBr

RN 62542-56-7 CAPLUS
 CN [1]Benzothieno[3,2-c]quinoline, 2-methyl-, hydrobromide (9CI) (CA INDEX NAME)

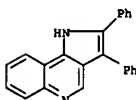


● HBr

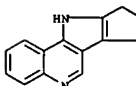
L7 ANSWER 187 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



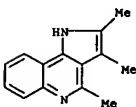
RN 61760-45-0 CAPLUS
 CN 1H-Pyrrolo[3,2-c]quinoline, 2,3-diphenyl- (9CI) (CA INDEX NAME)



RN 61760-46-1 CAPLUS
 CN Cyclopenta[4,5]pyrrolo[3,2-c]quinoline, 7,8,9,10-tetrahydro- (9CI) (CA INDEX NAME)

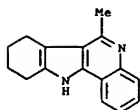


RN 61760-47-2 CAPLUS
 CN 1H-Pyrrolo[3,2-c]quinoline, 2,3,4-trimethyl- (9CI) (CA INDEX NAME)

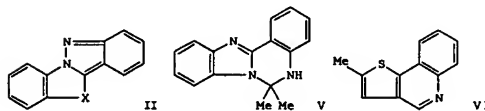


RN 61760-48-3 CAPLUS
 CN 7H-Indolo[3,2-c]quinoline, 8,9,10,11-tetrahydro-6-methyl- (9CI) (CA INDEX NAME)

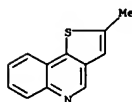
L7 ANSWER 187 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



L7 ANSWER 188 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 1976:523098 CAPLUS
 DN 85:123098
 TI Competitive cyclization of singlet and triplet nitrenes. Part II. Cyclization of 2-nitrenophenylthiophenes, -benzothiazoles, and -benzimidazoles
 AU McRobbie, Ian M.; Meth-Cohn, Otto; Suschitzky, Hans
 CS Dep. Chem. Appl. Chem., Univ. Salford, Salford, UK
 SO Tetrahedron Letters (1976), (12), 929-32
 CODEN: TELEAY; ISSN: 0040-4039
 DT Journal
 LA English
 GI

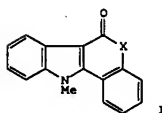


AB Thermolysis of 2-RC6H4NO2 (R = 2-benzothiazolyl, 1-methyl-2-benzimidazolyl) and (EtO)3P in cumene and of 2-RC6H4N3 (I) in cumene gave mainly the fused indazoles II (X = S, NMe, resp.) via singlet nitrenes and 2-RC6H4NH2 (III) via triplet nitrenes; in addition irradiation of I in PhCOMe gave 2-RC6H4N:NC6H4R-2 (IV) via the triplet nitrenes. Irradiation of I (R = 1-isopropyl-2-benzimidazolyl) in PhCOMe gave the benzimidazoquinazoline V and III via the triplet nitrene. Thermolysis of I (R = 3,5-dimethyl-2-thienyl) gave thienoquinoline VI and III whereas irradiation gave IV and a trace of III; all the products were formed via the triplet nitrene.
 IT 22971-31-9P
 RL: SPN (Synthetic preparation); PREP (Preparation) (preparation of)
 RN 22971-31-9 CAPLUS
 CN Thieno[3,2-c]quinoline, 2-methyl- (8CI, 9CI) (CA INDEX NAME)

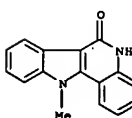


L7 ANSWER 188 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

L7 ANSWER 189 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 1976:135512 CAPLUS
 DN 84:135512
 TI Polycyclic indoles. I. Synthesis of 6-oxo derivatives of benzo[a]pyrano[4,3-b]indole and indolo[3,2-c]quinoline from 2-arylindole-3-carboxylic acids
 AU Bourdais, Jacques; Lorre, Anne
 CS Lab. Chim. Heterocycl. Organomet., Univ. Paris-Sud, Orsay, Fr.
 SO Journal of Heterocyclic Chemistry (1975), 12(6), 1111-15
 CODEN: JHTCAD; ISSN: 0022-152X
 DT Journal
 LA French
 OS CASREACT 84:135512
 GI

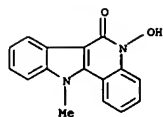


AB The tetracyclic indole I (X = O, NH, NOH) derivs. were prepared by lactonisation of 1-methyl-2-(2-hydroxyphenyl)indole-3-carboxylic acid or by reductive cyclization of 1-methyl-2-(2-nitrophenyl)indole-3-carboxylic acid, resp. These acids were obtained, in good yields, by alkaline hydrolysis of 1-methyl-2-aryl-3-trifluoroacetylindoles.
 IT 59050-44-1P 59050-43-2P
 RL: SPN (Synthetic preparation); PREP (Preparation) (preparation of)
 RN 59050-44-1 CAPLUS
 CN 6H-Indolo[3,2-c]quinolin-6-one, 5,11-dihydro-11-methyl- (9CI) (CA INDEX NAME)

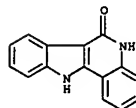


RN 59050-45-2 CAPLUS
 CN 6H-Indolo[3,2-c]quinolin-6-one, 5,11-dihydro-5-hydroxy-11-methyl- (9CI) (CA INDEX NAME)

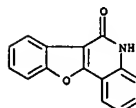
L7 ANSWER 189 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



L7 ANSWER 190 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 1975:593122 CAPLUS
 DN 83:193122
 TI Nucleophilic displacement of aromatic fluorine. III. Indoloquinolines and benzofuranoquinolines
 AU Walser, Armin; Silverman, Gladys; Flynn, Thomas; Fryer, R. Ian
 CS Hoffman-LaRoche Inc., Nutley, NJ, USA
 SO Journal of Heterocyclic Chemistry (1975), 12(2), 351-8
 CODEN: JHTCAD; ISSN: 0022-152X
 DT Journal
 LA English
 OS CASREACT 83:193122
 GI For diagram(s), see printed CA Issue.
 AB Several indoloquinoline, benzofuranoquinoline, and indolobenzazepine derivs., e.g. I-IV were prepared by intramol nucleophilic displacement of fluorine. Thus V (R = OEt) was aminated to give V (R = NH₂), which was treated with NaH to give I.
 IT 18735-98-3P 57046-70-5P 57046-71-6P
 57046-72-7P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation of)
 RN 18735-98-3 CAPLUS
 CN 6H-Indolo[3,2-c]quinolin-6-one, 5,11-dihydro- (8CI, 9CI) (CA INDEX NAME)

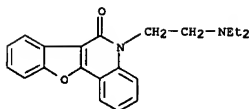


RN 57046-70-5 CAPLUS
 CN Benzofuro[3,2-c]quinolin-6(5H)-one (9CI) (CA INDEX NAME)

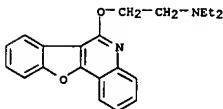


RN 57046-71-6 CAPLUS
 CN Benzofuro[3,2-c]quinolin-6(5H)-one, 5-[2-(diethylamino)ethyl]- (9CI) (CA INDEX NAME)

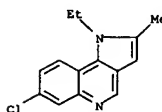
L7 ANSWER 190 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



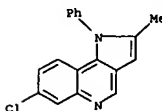
RN 57046-72-7 CAPLUS
 CN Ethanamine, 2-(benzofuro[3,2-c]quinolin-6-yloxy)-N,N-diethyl- (9CI) (CA INDEX NAME)



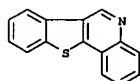
L7 ANSWER 191 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 1975:592997 CAPLUS
 DN 83:192997
 TI Conversion of (2-chloroalkyl)amines into heterocyclic compounds. I. 2-Methylindoles, 1,5,6,7-tetrahydro-3-methylindol-4-ones, and related heterocycles
 AU McDonald, Brian G.; Proctor, George R.
 CS Dep. Pure Appl. Chem., Univ. Strathclyde, Glasgow, UK
 SO Journal of the Chemical Society, Perkin Transactions 1: Organic and Bio-Organic Chemistry (1972-1999) (1975), (15), 1446-50
 CODEN: JCPRB4; ISSN: 0300-922X
 DT Journal
 LA English
 OS CASREACT 83:192997
 GI For diagram(s), see printed CA Issue.
 AB The allylanilines I [R = H, Me, (CH₂)₂CO₂Me, R₁ = H; R = H, R₁ = 2-Ph, 2-CO₂Me, 3-Me, 4-Cl, 4-Me, 4-CO₂Me], prepared by condensation of R₁C₆H₄NHR with CH₂:CClCH₂R₂ (R₂ = Cl, I), gave 5-75% II on heating with polyphosphoric acid at 100° or BF₃-MeOH at 150°. This method was used for the preparation of other heterocyclic compds. e.g. condensation of 4,7-dichloroquinoline with R₃NHCH₂CCl:CH₂ (R₃ = Ph, Et) and cyclization of the product formed gave 30-42% pyrroloquinolines III.
 IT 57662-92-7P 57662-94-9P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation of)
 RN 57662-92-7 CAPLUS
 CN 1H-Pyrrolo[3,2-c]quinoline, 7-chloro-1-ethyl-2-methyl- (9CI) (CA INDEX NAME)



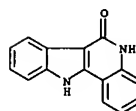
RN 57662-94-9 CAPLUS
 CN 1H-Pyrrolo[3,2-c]quinoline, 7-chloro-2-methyl-1-phenyl- (9CI) (CA INDEX NAME)



L7 ANSWER 192 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 1975:563448 CAPLUS
 DN 83:163448
 TI Chemistry of thienopyridines. XX. Relation of dipole moment to molecular structure
 AU Klemm, L. H.; Jacquot, R. D.
 CS Dep. Chem., Univ. Oregon, Eugene, OR, USA
 SO Journal of Heterocyclic Chemistry (1975), 12(4), 615-18
 CODEN: JHTCAD; ISSN: 0022-152X
 DT Journal
 LA English
 GI For diagram(s), see printed CA Issue.
 AB Dipole moments were measured for 3 bicyclic thienopyridines (e.g., I) and 3 tetracyclic dibenzothienopyridines (e.g., II) in benzene at 25°. The results agreed closely with predicted values based on vector addition of dipole moments for reference constituent compds. (e.g., quinoline and benzo[b]thiophene in the case of I).
 IT 33193-41-8
 RL: FRP (Properties) (dipole moment of)
 RN 33193-41-8 CAPLUS
 CN [1]Benzothieno[3,2-c]quinoline (8CI, 9CI) (CA INDEX NAME)

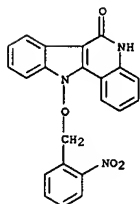


L7 ANSWER 193 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 1975:479115 CAPLUS
 DN 83:79115
 TI Organic nitrogen chemistry. II. Rearrangement in the reaction of oxindole with o-nitrobenzyl chloride
 AU Dave, V.; Warnhoff, E. W.
 CS Dep. Chem., Univ. West. Ontario, London, ON, Can.
 SO Tetrahedron (1975), 31(10), 1255-8
 CODEN: TETRAH; ISSN: 0040-4020
 DT Journal
 LA English
 GI For diagram(s), see printed CA Issue.
 AB Alkylation of oxindole with o-O2NC6H4CH2Cl gave indoloquinolones I and II, and dialkylation product III. I was formed by rearrangement of an initial alkylation product, and II by base-catalyzed elimination of o-O2NC6H4CHO from III and by a 1,5 sigmatropic rearrangement of IV which was formed thermally from III.
 IT 18735-98-3P 56503-60-7P 56503-61-8P 56503-62-9P 56503-63-0P
 RL: SPN (Synthetic preparation); PREP (Preparation) (preparation of)
 RN 18735-98-3 CAPLUS
 CN 6H-Indolo[3,2-c]quinolin-6-one, 5,11-dihydro- (8CI, 9CI) (CA INDEX NAME)

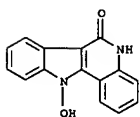


RN 56503-60-7 CAPLUS
 CN 6H-Indolo[3,2-c]quinolin-6-one, 5,11-dihydro-11-[(2-nitrophenyl)methoxy]- (9CI) (CA INDEX NAME)

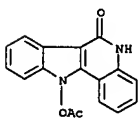
L7 ANSWER 193 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



RN 56503-61-8 CAPLUS
 CN 6H-Indolo[3,2-c]quinolin-6-one, 5,11-dihydro-11-hydroxy- (9CI) (CA INDEX NAME)

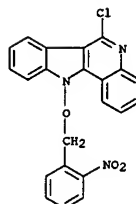


RN 56503-62-9 CAPLUS
 CN 6H-Indolo[3,2-c]quinolin-6-one, 11-(acetyloxy)-5,11-dihydro- (9CI) (CA INDEX NAME)

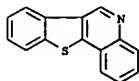


RN 56503-63-0 CAPLUS
 CN 11H-Indolo[3,2-c]quinoline, 6-chloro-11-[(2-nitrophenyl)methoxy]- (9CI) (CA INDEX NAME)

L7 ANSWER 193 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

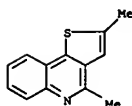


L7 ANSWER 194 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 1975:97908 CAPLUS
 DN 82:97908
 TI Condensed thiophene ring systems. XVII. New synthesis of
 10H-indeno[1,2-b]thiophene
 AU Iddon, Brian; Suschitzky, Hans; Taylor, David S.
 CS Ramage Lab., Univ. Salford, Salford, UK
 SO Journal of the Chemical Society, Perkin Transactions 1: Organic and
 Bio-Organic Chemistry (1972-1999) (1974), (21), 2505-8
 CODEN: JCPRB4; ISSN: 0300-922X
 DT Journal
 LA English
 GI For diagram(s), see printed CA Issue.
 AB The benzothiophene hydrazone I with NaOMe in hot MeO(CH₂)₂20 gave 30%
 title compound II, 10.5% benzothiophene III, and <5% hydrazine IV.
 Bamford-Stevens reaction of hydrazone V gave a complex mixture
 containing 18%
 benzothiophene VI and a trace of alkene VII.
 IT 55063-33-7P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation of)
 RN 55063-33-7 CAPLUS
 CN [1]Benzothieno[3,2-c]quinoline, bromo- (9CI) (CA INDEX NAME)



D1-Br

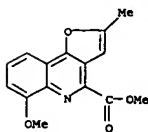
L7 ANSWER 195 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 1975:57494 CAPLUS
 DN 82:57494
 TI Intramolecular nitrene insertions into aromatic and heteroaromatic
 systems. II. Insertions into thiophene rings
 AU Cliff, Geoffrey R.; Jones, Gurnos; Woollard, John M.
 CS Dep. Chem., Univ. Keele, Keele, UK
 SO Journal of the Chemical Society, Perkin Transactions 1: Organic and
 Bio-Organic Chemistry (1972-1999) (1974), (17), 2072-6
 CODEN: JCPRB4; ISSN: 0300-922X
 DT Journal
 LA English
 OS CASREACT 82:57494
 GI For diagram(s), see printed CA Issue.
 AB Pyrolysis of 2-(2-azidobenzyl)-5-methylthiophene gave the thienoquinoline
 I. Similarly, 2-(2-azidobenzyl)thiophene gave thienoquinoline II and
 pyrroloindoles III and IV. The 3-(azidobenzyl)thiophene V on pyrolysis
 gave mainly the thienoquinoline VI and small amts. of thiophene VII and
 2-methyl-3-propylquinoline. The reactions occurred via aziridine
 intermediates.
 IT 49824-24-0P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation of)
 RN 49824-24-0 CAPLUS
 CN Thieno[3,2-c]quinoline, 2,4-dimethyl- (9CI) (CA INDEX NAME)



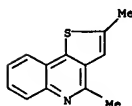
L7 ANSWER 196 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 1974:520598 CAPLUS
 DN 81:120598
 TI Fused pyridines
 IN Bleichert, Siegfried; Gericke, Rolf; Winterfeldt, Ekkehard
 PA BASF A.-G.
 SO Ger. Offen., 21 pp.
 CODEN: GWXKXK
 DT Patent
 LA German
 FAN, CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI DE 2301401	A1	19740718	DE 1973-2301401	19730112

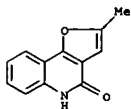
<--
 PRAI DE 1973-2301401 A 19730112
 GI For diagram(s), see printed CA Issue.
 AB About 20 pyridine compds. I-V [X = CH: C(OMe) or S; R = H or Me; R1 = H,
 CO₂Me, or CH₂CHMeOH; R2 = allyl, CH₂CCl:CH₂, or CH₂OH; R3 = H, CO₂Me, or
 CHO; R4 = Me or CH₂Br; R5 = e.g. allyl or CH₂COMe; R6 = Cl or OMe],
 useful
 as bactericides, were prepared by cyclization of di-Me
 (allylamino)maleates.
 Thus, 2 - MeOC₆H₄N(CH₂CH:CH₂)C(CO₂Me):CH(CO₂Me) was autoclaved in C₆H₆ at
 205° to give 22% I [X = CH: C(OMe), R = H, R1 = CO₂Me, R2 = allyl],
 which was treated with concentrated H₂SO₄ at room temperature to give
 66% II [X =
 CH: C(OMe)] and 7% III [X = CH: C(OMe), R3 = CO₂Me, R4 = Me].
 IT 40684-30-8P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation of)
 RN 40684-30-8 CAPLUS
 CN Furo[3,2-c]quinoline-4-carboxylic acid, 6-methoxy-2-methyl-, methyl ester
 (9CI) (CA INDEX NAME)



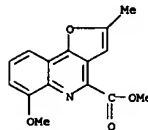
L7 ANSWER 197 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 1973:515471 CAPLUS
 DN 79:115471
 TI Intramolecular nitrene insertion reactions into thiophene rings
 AU Cliff, Geoffrey R.; Jones, Gurnos; Woollard, John McK.
 CS Dep. Chem., Univ. Keele, Keele/Staffordshire, UK
 SO Tetrahedron Letters (1973), (26), 2401-4
 CODEN: TELEAY; ISSN: 0040-4039
 DT Journal
 LA English
 GI For diagram(s), see printed CA Issue.
 AB Thermal decomposition of 2-(2-azidobenzyl)thiophene in C₆H₃Cl₃ at 190°
 gave 5% thieno[3,2-b]quinoline (I) and 3% 1,2-dihydro-3H-pyrrolo-(1,2-
 a)indole-3-thione (II) whereas 3-(2-azidobenzyl)-2,5-dimethylthiophene
 gave 15% of the parent amine, and 34% 2,4-dimethylthieno[3,2-c]quinoline
 (III). The mechanism of these reactions was discussed in terms of
 nitrene
 insertions.
 IT 49824-24-0P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation of)
 RN 49824-24-0 CAPLUS
 CN Thieno[3,2-c]quinoline, 2,4-dimethyl- (9CI) (CA INDEX NAME)



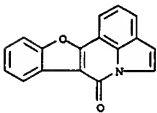
L7 ANSWER 198 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 1973:478573 CAPLUS
 DN 79:78573
 TI Alkylation of ambident heterocyclic anions. V. Rearrangement of heterocyclic compounds. III. Alkylation of 4-hydroxy-2-quinolone
 AU Kappe, Thomas; Fritz, Peter F.; Ziegler, Erich
 CS Inst. Org. Chem., Univ. Graz, Graz, Austria
 SO Chemische Berichte (1973), 106(6), 1927-42
 CODEN: CHBEAM; ISSN: 0009-2940
 DT Journal
 LA German
 GI For diagram(s), see printed CA Issue.
 AB Alkylation of the quinolones I (R = H or Et, R1 = H) with CH₂:CHCH₂Br gave the allyl derivs. I (R, R1 = H or CH₂CH:CH₂) and II (R = Et or CH₂CH:CH₂, R1 = CH₂CH:CH₂). Cyclization of I (R = CH₂CH:CH₂, R1 = H) (III) in HBr/HOAc gave the furoquinolone IV, which on heating rearranged to the isomer V. V was also obtained by thermolysis of III. Dehydrogenation of IV or V over Pd/C at >200° gave the furoquinolone VI. Reaction of II (R = Et (VII) or CH₂CH:CH₂ (VIII) R1 = CH₂CH:CH₂) with HBr-HOAc gave the spiro compound IX and II (R = Et, R1 = CH₂CHMeOH), resp. Catalytic hydrogenation of VIII over Pd gave II (R = R1 = Pr) and X; VII gave II (R = Et, R1 = Pr).
 IT 17889-88-2P
 RL: SPN (Synthetic preparation); PREP (Preparation) (preparation of)
 RN 17889-88-2 CAPLUS
 CN Furo[3,2-c]quinolin-4(5H)-one, 2-methyl- (8CI, 9CI) (CA INDEX NAME)



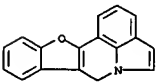
L7 ANSWER 199 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 1973:84229 CAPLUS
 DN 78:84229
 TI Additions to the triple bond. XIX. Tricyclic heteroaromatic compounds via sigmatropic rearrangement
 AU Bleichert, Siegfried; Gericke, Rolf; Winterfeldt, Ekkehard
 CS Org.-Chem. Inst., Tech. Univ. Hannover, Hanover, Fed. Rep. Ger.
 SO Chemische Berichte (1973), 106(1), 355-67
 CODEN: CHBEAM; ISSN: 0009-2940
 DT Journal
 LA German
 GI For diagram(s), see printed CA Issue.
 AB Treatment of the quinolone (I, R = H) with H₂SO₄ gave the lactone (II). Similarly, the furoquinoline (III) was obtained from I (R = Cl).
 Reaction of I (R = Cl) with SOCl₂ gave the chloride (IV), which on hydrolysis gave the ketone (V). Storage of V for several days at 0° gave the enol lactone (VI). Treatment of I (R = H) with N-bromosuccinimide gave the furoquinoline (VII). Pfitzner-Moffatt oxidation of the diol VIII gave the aldehyde (IX).
 IT 40684-30-8P
 RL: SPN (Synthetic preparation); PREP (Preparation) (preparation of)
 RN 40684-30-8 CAPLUS
 CN Furo[3,2-c]quinoline-4-carboxylic acid, 6-methoxy-2-methyl-, methyl ester (9CI) (CA INDEX NAME)



L7 ANSWER 200 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 1973:71950 CAPLUS
 DN 78:71950
 TI New synthesis of the coumestan ring system
 AU Kappe, Thomas; Schmidt, Heinrich
 CS Inst. Org. Chem., Univ. Graz, Graz, Austria
 SO Organic Preparations and Procedures International (1972), 4(5), 233-6
 CODEN: OPPIAK; ISSN: 0030-4948
 DT Journal
 LA English
 GI For diagram(s), see printed CA Issue.
 AB Cyclodehydrogenation of 4-hydroxycoumarin derivs. (I; R = H, Me, MeO; R1 = H, Me) in refluxing Ph₂O containing 10% Pd/C gave the corresponding coumestan derivate. (II; 57% R = R1 = H; 76% R = Me, R1 = H; 80% R = R1 = Me; and 69% R = MeO, R1 = H). Treatment of 6-hydroxy-1,2-dihydro-5-phenyl-4H-pyrrolo[3,2,1-ij]quinolin-4-one similarly gave 58% 7H-benzofuro[3,2-c]pyrrolo[3,2,1-ij]quinolin-7-one.
 IT 39876-27-2P 40369-59-3P
 RL: SPN (Synthetic preparation); PREP (Preparation) (preparation of)
 RN 39876-27-2 CAPLUS
 CN 7H-Benzofuro[3,2-c]pyrrolo[3,2,1-ij]quinolin-7-one (9CI) (CA INDEX NAME)



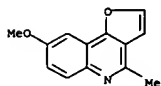
RN 40369-59-3 CAPLUS
 CN 7H-Benzofuro[3,2-c]pyrrolo[3,2,1-ij]quinoline (9CI) (CA INDEX NAME)



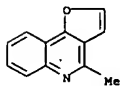
L7 ANSWER 201 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 1973:4162 CAPLUS
 DN 78:4162
 TI Synthesis of pyrrolo[1,2-a]quinoline by the Doebner-Miller reaction
 AU Barbieri, Wanda; Bernardi, Luigi; Colo, Vittorio; Patelli, Bianca
 CS Ist. Ric., Soc. "Farmitalia", Milan, Italy
 SO Chimica e l'Industria (Milan, Italy) (1972), 54(9), 786-9
 CODEN: CINMAB; ISSN: 0009-4315
 DT Journal
 LA Italian
 GI For diagram(s), see printed CA Issue.
 AB The pyrroloquinolines I-III were obtained by the reaction of PhNH₂ with HCOCH₂CH₂CO₂Me. The isomer of III was prepared by hydrolyzing II to the acid and cyclizing this with ClCO₂Et and a base. Treatment of I with acid gave 6-carboxymethyl-2-oxo-2,3,4,5-tetrahydropyrrolo[1,2-a]quinoline. When PhNH₂.HCl was treated with HCOCH₂CH₂CO₂Me, II and 6-benzamido-methyl-k-oxo-2,3,4,5-tetrahydropyrrolo[1,2-a]quinoline were obtained.
 IT 38678-51-2P
 RL: SPN (Synthetic preparation); PREP (Preparation) (preparation of)
 RN 38678-51-2 CAPLUS
 CN 1H-Dipyrrolo[1,2-a:3',2'-c]quinoline (9CI) (CA INDEX NAME)



L7 ANSWER 202 OF 273 CAPLUS COPYRIGHT 2005 ACS ON STN
 AN 1972:501419 CAPLUS
 DN 77:101419
 TI Synthesis of quinoline derivatives. III. Synthesis of furoquinolines
 AU Chaudgar, R. J.; Trivedi, K. N.
 CS Dep. Chem., M. S. Univ. Baroda, Baroda, India
 SO Journal of the Indian Chemical Society (1972), 49(5), 513-18
 CODEN: JICSAH; ISSN: 0019-4522
 DT Journal
 LA English
 GI For diagram(s), see printed CA Issue.
 AB 2-Methyl-3-allyl-4-quinolinol on ozonolysis followed by hydrogenation gave
 2-methyl-3-formylmethyl-4-quinolinol, which on cyclization with polyphosphoric acid gave 4-methylfuro[3,2-c]quinoline I (R = R1 = H). Similarly 2,8-dimethyl- and 6-methoxy-2-methyl-3-allyl-4-quinolinol gave 4,6-dimethyl- and 8-methoxy-4-methylfuro[3,2-c]quinoline (I, R = H, R1 = Me; R = OMe, R1 = H), resp. Several substituted α -allylacetoacetyl amides (II) were cyclized with H2SO4 to give 2,3-dihydro-2,4-dimethylfuro-[2,3-b]quinolines (III, R = 6-MeO, benzo[h], 5,8-dimethyl, 6-Cl, 8-Me). II hydrogenated on Pd/C gave α -propylacetoacetyl-amides which underwent cyclization with H2SO4 to give 4-methyl-3-propylcarbostyryl derivs.
 IT 34547-92-7P 34594-11-1P 34594-14-4P
 RL: SPN (Synthetic preparation); PREP (Preparation) (preparation of)
 RN 34547-92-7 CAPLUS
 CN Furo[3,2-c]quinoline, 8-methoxy-4-methyl- (6CI, 9CI) (CA INDEX NAME)

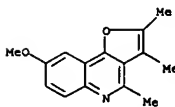


RN 34594-11-1 CAPLUS
 CN Furo[3,2-c]quinoline, 4-methyl- (6CI, 9CI) (CA INDEX NAME)

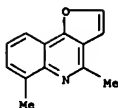


RN 34594-14-4 CAPLUS
 CN Furo[3,2-c]quinoline, 4,6-dimethyl- (9CI) (CA INDEX NAME)

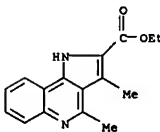
L7 ANSWER 203 OF 273 CAPLUS COPYRIGHT 2005 ACS ON STN
 AN 1972:474698 CAPLUS
 DN 77:74698
 TI Benzofurans. XLIX. Correlation between the structures and ionization constants of some furoquinolines
 AU Demerseman, Pierre; Pene, Cecile; Colin, Genevieve; Royer, Rene; Reynaud, Rene; Rumpf, Paul
 CS Ser. Chim. Fondation Curie, Inst. Radium, Paris, Fr.
 SO Bulletin de la Societe Chimique de France (1972), (4), 1366-8
 CODEN: BSCFAS; ISSN: 0037-8968
 DT Journal
 LA French
 AB The acidity of protonated furoquinolines in which the furan is fused to the benzene ring of the quinoline parallels that of analogous quinolines and is determined by ring substituents. A proximity effect of unknown origin decreased the basicity of furoquinolines containing MeO substituents ortho to the furan ring; MeO para to N increased basicity. Steric inhibition to protonation is observed in the case of the 2,3-dimethylfuro-[2,3-b]quinoline. The effect of the fusion position of the furan ring, on the quinoline, on the electron d. map and on the N O conjugation is discussed. The tautomerism of 4-hydroxyquinolines and furoquinolines is also discussed.
 IT 15309-20-3
 RL: PRP (Properties) (basicity and uv spectrum of)
 RN 15309-20-3 CAPLUS
 CN Furo[3,2-c]quinoline, 8-methoxy-2,3,4-trimethyl- (8CI, 9CI) (CA INDEX NAME)



L7 ANSWER 202 OF 273 CAPLUS COPYRIGHT 2005 ACS ON STN (Continued)



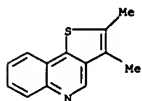
L7 ANSWER 204 OF 273 CAPLUS COPYRIGHT 2005 ACS ON STN
 AN 1972:461852 CAPLUS
 DN 77:61852
 TI Pachorr cyclization. II. Further reactions with pyrrole derivatives
 AU Beveridge, Susan; Huppertz, J. L.
 CS Div. Plant Ind., CSIRO, Canberra, Australia
 SO Australian Journal of Chemistry (1972), 25(6), 1341-6
 CODEN: AJCHAS; ISSN: 0004-9425
 DT Journal
 LA English
 GI For diagram(s), see printed CA Issue.
 AB Pachorr cyclization of pyrrole (I, R = Ac) by Cu-catalyzed decomposition of the diazonium salt gave 77% spiroindoline (II). However, under similar conditions, I (R = Me) gave benzotriazole (III) and dipyrromethane (IV). Treatment of II with HCl gave pyrrolo[3,2-c]quinoline (V).
 IT 37073-17-9P
 RL: SPN (Synthetic preparation); PREP (Preparation) (preparation of)
 RN 37073-17-9 CAPLUS
 CN 1H-Pyrrolo[3,2-c]quinoline-2-carboxylic acid, 3,4-dimethyl-, ethyl ester (9CI) (CA INDEX NAME)



L7 ANSWER 205 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 1972:448431 CAPLUS
 DN 77:48431
 TI Thieno[3,2-c]quinoline derivatives
 IN Makikado, Tokio
 PA Shionogi and Co., Ltd.
 SO Jpn. Tokkyo Koho, 4 pp.
 CODEN: JAXXAD
 DT Patent
 LA Japanese
 FAN CNT 1

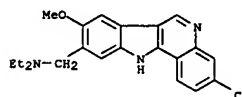
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 47013918	B4	19720426	JP 1969-19758	19690314

GI For diagram(s), see printed CA Issue.
 AB The title compds. (I) and (II), useful as antipyretics, sedatives, antiinflammatory agents, etc., were prepared by heating the corresponding 1- β , γ -alkylene-4(1H)-quinolinethiones. E.g., 1 g 1-allyl-4(1H)-quinolinethione in N,N-diethyl-m-toluidine was heated 6 hr at 260° to give 240 mg I (R1 = R2 = H). Similarly prepared were 2 more I (R1 and R2 given): Me, H; H, Me. Also prepared was II.
 IT 37578-11-3P
 RL: SPN (Synthetic preparation); PREP (Preparation) (preparation of)
 RN 37578-11-3 CAPLUS
 CN Thieno[3,2-c]quinoline, 2,3-dimethyl- (9CI) (CA INDEX NAME)



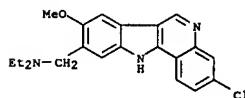
L7 ANSWER 206 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 1972:107928 CAPLUS
 DN 76:107928
 TI Mechanism of action of amodiaquine. Synthesis of its indoloquinoline analog
 AU Marquez, Victor E.; Cranston, Joseph W.; Ruddon, Raymond W.; Kier, Lemont B.; Burckhalter, Joseph H.
 CS Coll. Pharm., Univ. Michigan, Ann Arbor, MI, USA
 SO Journal of Medicinal Chemistry (1972), 15(1), 36-9
 CODEN: JMCMAR; ISSN: 0022-2623

DT Journal
 LA English
 AB The ring-closed analog of the antimalarial drug amodiaquine (I) [86-42-0], namely 3-chloro-8-methoxy-9-diethylaminomethyl-11H-indolo[3,2-c]quinoline (II) [34374-22-6], showed greater binding to DNA and greater inhibition of E. coli RNA polymerase than did I, possibly due to the increased planar area afforded by II. DNA binding was measured by the increase in melting temperature of native DNA. A strong hypochromic effect was seen in the uv spectrum of the II-DNA complex as well. II was obtained by the Fischer indole synthesis from 5-amino-2-methoxy-N,N-diethylbenzylamine (converted to the 5-hydrazino derivative) and 7-chloro-1,2,3,4-tetrahydroquinolin-4-one.
 IT 34374-22-6
 RL: BIOL (Biological study) (DNA binding with, amodiaquine in relation to)
 RN 34374-22-6 CAPLUS
 CN 11H-Indolo[3,2-c]quinoline-9-methanamine, 3-chloro-N,N-diethyl-8-methoxy- (9CI) (CA INDEX NAME)



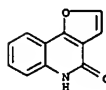
IT 35771-71-2P
 RL: SPN (Synthetic preparation); PREP (Preparation) (preparation of)
 RN 35771-71-2 CAPLUS
 CN 11H-Indolo[3,2-c]quinoline-9-methanamine, 3-chloro-N,N-diethyl-8-methoxy-, dihydrochloride (9CI) (CA INDEX NAME)

L7 ANSWER 206 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

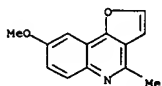


● 2 HCl

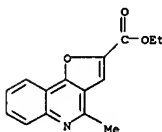
L7 ANSWER 207 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 1972:4048 CAPLUS
 DN 76:4048
 TI DDQ [2,3-dichloro-5,6-dicyanoquinone] dehydrogenation of dihydrodictamnine
 AU Piozzi, F.; Venturella, P.; Bellino, A.
 CS Inst. Org. Chem., Univ. Palermo, Palermo, Italy
 SO Organic Preparations and Procedures International (1971), 3(5), 223-6
 CODEN: OPPIAK; ISSN: 0030-4948
 DT Journal
 LA English
 GI For diagram(s), see printed CA Issue.
 AB Dictamnine (I) was quant. dehydrogenated by refluxing in anhydrous dioxane with DDQ for 36 hr. Similarly angular 1,2,4',5'-tetrahydro-2-oxofurano[3',2'-3,4]quinoline (II) was dehydrogenated by refluxing 6 hr.
 IT 35136-12-0P
 RL: SPN (Synthetic preparation); PREP (Preparation) (preparation of)
 RN 35136-12-0 CAPLUS
 CN Furo[3,2-c]quinolin-4(5H)-one (6CI, 9CI) (CA INDEX NAME)



L7 ANSWER 208 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 1972:3727 CAPLUS
 DN 76:3727
 TI Synthesis of quinoline derivatives. IV. Synthesis of furoquinolines
 AU Chudgar, R. J.; Trivedi, K. N.
 CS Fac. Sci., M. S. Univ. Baroda, Baroda, India
 SO Journal of the Indian Chemical Society (1971), 48(8), 739-42
 CODEN: JICSAH; ISSN: 0019-4522
 DT Journal
 LA English
 GI For diagram(s), see printed CA Issue.
 AB Furoquinolines (I) were prepared by treatment of quinolinols (II) with Et bromomalonate (III). For example, 3.7 g II (R1 = R2 = H) in 200 ml MeCOEt was refluxed with 4.8 g III in the presence of 10 g K2CO3 for 35 hr to give 2 g I (R1 = R2 = H, R3 = CO2Et) (IV). IV was hydrolyzed to I (R1 = R2 = H, R3 = CO2H) which in turn was decarboxylated to I (R1 = R2 = R3 = H). I (R1 = OMe, R2 = R3 = H) and I (R1 = R3 = H, R2 = Me) were prepared similarly. Treatment of II with BrCH2CO2Et instead of III gave 4-OCH2CO2Et derivs. of II.
 IT 34547-92-7P 34594-09-7P 34594-10-0P
 34594-11-1P 34594-12-2P 34594-13-3P
 34594-14-4P 34594-17-7P 34594-18-8P
 RL: SPN (Synthetic preparation); PREP (Preparation) (preparation of)
 RN 34547-92-7 CAPLUS
 CN Furo[3,2-c]quinoline, 8-methoxy-4-methyl- (6CI, 9CI) (CA INDEX NAME)

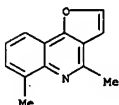


RN 34594-09-7 CAPLUS
 CN Furo[3,2-c]quinoline-2-carboxylic acid, 4-methyl-, ethyl ester (9CI) (CA INDEX NAME)

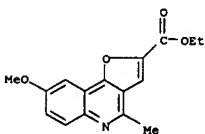


RN 34594-10-0 CAPLUS
 CN Furo[3,2-c]quinoline-2-carboxylic acid, 4-methyl- (9CI) (CA INDEX NAME)

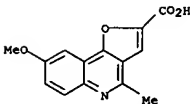
L7 ANSWER 208 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)
 CN Furo[3,2-c]quinoline, 4,6-dimethyl- (9CI) (CA INDEX NAME)



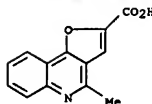
RN 34594-17-7 CAPLUS
 CN Furo[3,2-c]quinoline-2-carboxylic acid, 8-methoxy-4-methyl-, ethyl ester (9CI) (CA INDEX NAME)



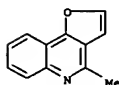
RN 34594-18-8 CAPLUS
 CN Furo[3,2-c]quinoline-2-carboxylic acid, 8-methoxy-4-methyl- (9CI) (CA INDEX NAME)



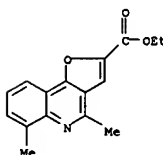
L7 ANSWER 208 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



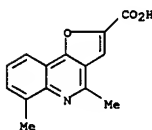
RN 34594-11-1 CAPLUS
 CN Furo[3,2-c]quinoline, 4-methyl- (6CI, 9CI) (CA INDEX NAME)



RN 34594-12-2 CAPLUS
 CN Furo[3,2-c]quinoline-2-carboxylic acid, 4,6-dimethyl-, ethyl ester (9CI) (CA INDEX NAME)

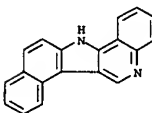


RN 34594-13-3 CAPLUS
 CN Furo[3,2-c]quinoline-2-carboxylic acid, 4,6-dimethyl- (9CI) (CA INDEX NAME)

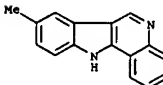


RN 34594-14-4 CAPLUS

L7 ANSWER 209 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 1971:496680 CAPLUS
 DN 75:96680
 TI Association between photodynamic and enzyme-inducing activities in polycyclic compounds
 AU Epstein, Samuel S.; Buu-Hoi, N. P.; Do-Phouc Hien
 CS Lab. Environ. Toxicol. Carcinog., Child. Cancer Res. Found., Inc., Boston, MA, USA
 SO Cancer Research (1971), 31(8), 1087-94
 CODEN: CNREAS; ISSN: 0008-5472
 DT Journal
 LA English
 GI For diagram(s), see printed CA Issue.
 AB A comparative study of the photodynamic activities of 240 polycyclic compds., determined with Paramecium caudatum, and their in vivo enzyme-inducing capacity for xanthine hydroxylase in rats demonstrated a highly significant association between these two activities. Compds. with high photodynamic activity such as 7-bromobenz[a]anthracene (II), benz[a]anthracene, and 3-methylbenz[a]anthracene were 10-fold more effective enzyme inducers than compds. with low photodynamic activity such as 7,12-diphenylbenz[a]anthracene (II).
 IT 4240-63-5 4295-30-1 4295-33-4
 4295-49-2
 RL: BIOL (Biological study)
 (enzyme induction by, photodynamic activity in relation to)
 RN 4240-63-5 CAPLUS
 CN 13H-Benz[4,5]indolo[3,2-c]quinoline (7CI, 8CI, 9CI) (CA INDEX NAME)

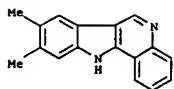


RN 4295-30-1 CAPLUS
 CN 11H-Indolo[3,2-c]quinoline, 8-methyl- (7CI, 8CI) (CA INDEX NAME)

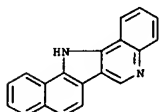


RN 4295-33-4 CAPLUS
 CN 11H-Indolo[3,2-c]quinoline, 8,9-dimethyl- (7CI, 8CI, 9CI) (CA INDEX NAME)

L7 ANSWER 209 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



RN 4295-49-2 CAPLUS
 CN 13H-Benz[6,7]indolo[3,2-c]quinoline (7CI, 8CI, 9CI) (CA INDEX NAME)



L7 ANSWER 210 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN

AN 1971:448945 CAPLUS

DN 75:48945

TI Condensed thiophenes from sulfur bridging. II. Catalyzed reaction of arylaryls with hydrogen sulfide

AU Klemm, L. H.; McCoy, D. R.; Klopfenstein, C. E.

CS Dep. Chem., Univ. Oregon, Eugene, OR, USA

SO Journal of Heterocyclic Chemistry (1971), 8(3), 383-9

CODEN: JHCTAD; ISSN: 0022-152X

DT Journal

LA English

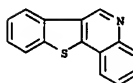
AB Sulfur bridging into the phenylpyridines, 2- and 3-phenylquinolines, and the symmetric bipyridines was effected by means of H₂S and an alumina catalyst at 630° to give [1]benzothienopyridines, [1]benzothienoquinolines, and thienodipyridines, resp. Structures of products were assigned on the basis of spectral and chromatographic studies, as well as of sep. syntheses. Relative yields of the various products are rationalized in terms of a model for interaction between a chemisorbed S atom and the substrate mol.

IT 33193-41-8P

RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation of)

RN 33193-41-8 CAPLUS

CN [1]Benzothieno[3,2-c]quinoline (8CI, 9CI) (CA INDEX NAME)



L7 ANSWER 211 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN

AN 1971:405654 CAPLUS

DN 75:5654

TI 4-Hydroxycarboxystyrylalkane carboxylic acids and dihydrobenzazepinolonocarboxylates

AU Hoerlein, Ulrich

CS Chem.-Wiss. Lab. Pharma, Farbenfabr. Bayer, Wuppertal-Elberfeld, Fed.

Rep.

Ger.

SO Archiv der Pharmazie und Berichte der Deutschen Pharmazeutischen Gesellschaft (1971), 304(2), 99-108

CODEN: APBDJW; ISSN: 0376-0367

DT Journal

LA German

GI For diagram(s), see printed CA Issue.

AB 4-Hydroxy-1-phenylcarboxystyryl-3-acetic acid or its 7-chloro derivative, resp.,

reacted with Ac₂O to give I (X = H₂) (II) or in the presence of Et₃N to give I (X = OMe), which with basic primary or secondary amines gave III (e.g. R₁ = H, R₂ = (CH₂)₂NEt₂ or (CH₂)₃NMe₂; (R₁R₂) = CH₂CH₂NMeCH₂CH₂). Reaction of II with NH₃ or amines gave IV (R = H or Cl, R₁ = H, R₂ = NH₂, NHEt, NMe₂, or NPr₂). Etherification of the 4-hydroxy group

(especially as, e.g., R₁ = (CH₂)₂NEt₂) in IV (R = Cl or NO₂, R₂ = OMe or OEt) in some cases increased the reactivity, e.g. as to hydrolysis, at this position.

IT 32438-38-3P 32438-39-6P 32438-40-7P

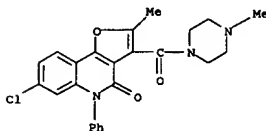
32438-41-8P 32510-36-4P 32608-02-9P

RL: SPN (Synthetic preparation); PREP (Preparation)

(preparation of)

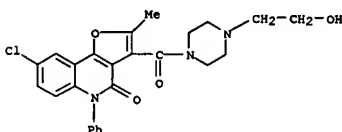
RN 32438-38-3 CAPLUS

CN Furo[3,2-c]quinolin-4(5H)-one, 7-chloro-2-methyl-3-[(4-methyl-1-piperazinyl)carbonyl]-5-phenyl- (8CI) (CA INDEX NAME)



RN 32438-39-4 CAPLUS

CN Furo[3,2-c]quinolin-4(5H)-one, 7-chloro-3-[(4-(2-hydroxyethyl)-1-piperazinyl)carbonyl]-2-methyl-5-phenyl- (8CI) (CA INDEX NAME)

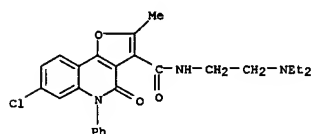


L7 ANSWER 211 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

RN 32438-40-7 CAPLUS

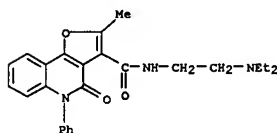
CN Furo[3,2-c]quinoline-3-carboxamide,

7-chloro-N-[2-(diethylamino)ethyl]-4,5-dihydro-2-methyl-4-oxo-5-phenyl- (8CI) (CA INDEX NAME)



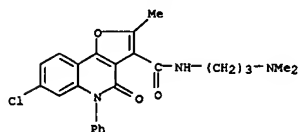
RN 32438-41-8 CAPLUS

CN Furo[3,2-c]quinoline-3-carboxamide, N-[2-(diethylamino)ethyl]-4,5-dihydro-2-methyl-4-oxo-5-phenyl- (8CI) (CA INDEX NAME)



RN 32510-36-4 CAPLUS

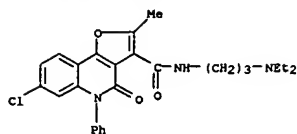
CN Furo[3,2-c]quinoline-3-carboxamide, 7-chloro-N-[3-(dimethylamino)propyl]-4,5-dihydro-2-methyl-4-oxo-5-phenyl- (8CI) (CA INDEX NAME)



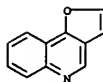
RN 32608-02-9 CAPLUS

CN Furo[3,2-c]quinoline-3-carboxamide, 7-chloro-N-[3-(diethylamino)propyl]-4,5-dihydro-2-methyl-4-oxo-5-phenyl- (8CI) (CA INDEX NAME)

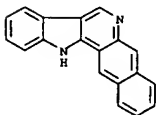
L7 ANSWER 211 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



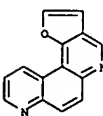
L7 ANSWER 212 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 1971:42243 CAPLUS
 DN 74:42243
 TI Pyrolysis of some anhydrides of the pyrrole series
 AU Cava, Michael P.; Bravo, L.
 CS Dep. Chem., Univ. Pennsylvania, Philadelphia, PA, USA
 SO Tetrahedron Letters (1970), (53), 4631-4
 CODEN: TELEAY; ISSN: 0040-4039
 DT Journal
 LA English
 GI For diagram(s), see printed CA Issue.
 AB I is heated to give 4 products: II, III, and 2 addnl. dioxobenzodipyrroles; 1-phenyl-2,3-dehydropyrrole is not obtained. Furo[3,2-c]quinoline (IV) is obtained from V.
 IT 234-07-1P
 RL: SPN (Synthetic preparation); PREP (Preparation) (preparation of)
 RN 234-07-1 CAPLUS
 CN Furo[3,2-c]quinoline (8CI, 9CI) (CA INDEX NAME)



L7 ANSWER 213 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 1970:509647 CAPLUS
 DN 73:109647
 TI Synthesis of benzo[g]quinoline derivatives. VIII. 1,2,3,4-Tetrahydro-4-oxobenzo[g]quinoline in the Fischer and Friedlaender reactions
 AU Bekhli, A. F.; Kozyreva, N. P.
 CS Inst. Med. Parazitol. Trop. Med. im. Martsinovskogo, Moscow, USSR
 SO Khimiya Geterotsiklicheskih Soedinenii (1970), (6), 802-3
 CODEN: KGSSAQ; ISSN: 0132-6244
 DT Journal
 LA Russian
 GI For diagram(s), see printed CA Issue.
 AB A mixture of I (X = O) (III), EtOH, AcOH, and PhNH₂ was refluxed 1.5 hr to
 yield 83% I (X = NNHPh) (III), m. 165-6°. III was heated 30 min with stirring in 20% H₂SO₄ on a boiling water bath to give 57% IV, m. >360°. A solution of II in EtOH was treated under N with o-H₂NC₆H₄CHO and 10% NaOH and kept 48 hr at room temperature under N to give 82% V, m. 223-4°. Ir data are given.
 IT 28731-48-8P
 RL: SPN (Synthetic preparation); PREP (Preparation) (preparation of)
 RN 28731-48-8 CAPLUS
 CN 12H-Benz[g]indolo[3,2-c]quinoline (8CI, 9CI) (CA INDEX NAME)

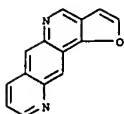


L7 ANSWER 214 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 1970:435246 CAPLUS
 DN 73:35246
 TI 1,4-Cycloaddition reactions. III. Synthesis of furo[3,2-c]pyrido[2,3-g]quinolines, furo[2,3-a][4,7]phenanthrolines, furo[3,2-c]pyrrolo[2,3-g]quinolines, furo[3,2-c]pyrrolo[3,2-g]quinolines, and furo[3,2-c]furo[2',3':4,5]pyrido[2,3-g]quinolines from 2,3-dihydro-5-methylfuran and Schiff bases
 AU Perricone, Salvatore C.; Worth, Donald F.; Elalager, Edward F.
 CS Chem. Dep., Parke, Davis and Co., Ann Arbor, MI, USA
 SO Journal of Heterocyclic Chemistry (1970), 7(3), 537-42
 CODEN: JHTCAD; ISSN: 0022-152X
 DT Journal
 LA English
 AB The 1,4-cycloaddn. of 2,3-dihydro-5-methylfuran (I) to 1-acetyl-1,2,3,4-tetrahydro-6-[(p-hydroxybenzylidene)amino]quinoline in the presence of BF₃ gave 2 pairs of epimers, namely dl-10-acetyl-2,3,3a,4,5,7,8,9,10,11b-decahydro-4-(p-hydroxyphenyl)-11b-methylfuro[3,2-c]pyrido[2,3-g]quinoline and dl-8-acetyl-2,3,3a,4,5,8,9,10,11,11c-decahydro-4-(p-hydroxyphenyl)-11c-methylfuro[2,3-a][4,7]phenanthroline.
 dl-9-Acetyl-3,3a,4,5,7,8,9,10b-octahydro-4-(p-hydroxyphenyl)-10b-methyl-2H-furo[3,2-c]pyrrolo[2,3-g]quinoline was the predominant product isolated from the reaction of I with
 1-acetyl-5-[p-(hydroxybenzylidene)amino]indoli
 ne. 1-Acetyl-6-[(p-hydroxybenzylidene)amino]indoline treated with I gave 2 epimers of
 dl-7-acetyl-3,3a,4,5,7,8,9,10b-octahydro-4-(p-hydroxyphenyl)-10b-methyl-2H-furo[3,2-c]pyrrolo[3,2-g]quinoline. dl-2,3,3a,4,5,6b,8,9,9a,10,11,12b-dodecahydro-4,10-bis-(p-methoxyphenyl)-6b,12b-dimethylfuro[3,2-c]furo[2',3':4,5]pyrido[2,3-g]quinoline was formed by reaction of I with N,N'-bis(p-methoxybenzylidene)-p-phenylenediamine. None of the compds. exhibited appreciable biol. activity.
 IT 28641-41-0DP, Furo[2,3-a][4,7]phenanthroline, derivs.
 28641-42-1DP, Furo[3,2-c]pyrido[2,3-g]quinoline, derivs.
 RL: SPN (Synthetic preparation); PREP (Preparation) (preparation of)
 RN 28641-41-0 CAPLUS
 CN Furo[2,3-a][4,7]phenanthroline (8CI, 9CI) (CA INDEX NAME)

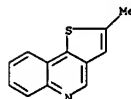


RN 28641-42-1 CAPLUS
 CN Furo[3,2-c]pyrido[2,3-g]quinoline (8CI, 9CI) (CA INDEX NAME)

L7 ANSWER 214 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



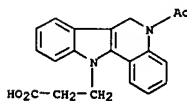
L7 ANSWER 215 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 1969:449733 CAPLUS
 DN 71:49733
 TI Thio-Claisen rearrangements of allyl and propargyl 4-quinolyl sulfides
 AU Makisumi, Yasuo; Murabayashi, Akira
 CS Shionogi Res. Lab., Shionogi and Co., Ltd., Osaka, Japan
 SO Tetrahedron Letters (1969), (24), 1971-4
 CODEN: TELEAY; ISSN: 0040-4039
 DT Journal
 LA English
 OS CASREACT 71:49733
 AB Allyl 4-quinolyl sulfide heated 2 hrs. at 200° in the presence of 1.5 moles (PrCO)2O yielded 87% 3-allyl-4(1H)-quinolyl thiolobutyrate, oil; picrate, m. 149-50°, hydrolyzed to the intermediate 3-allyl-4(1H)-quinolinethione. Alkylation of Na 4-quinolylmercaptide with methallyl chloride and the methallyl 4-quinolyl sulfide (I), m. 47-8°, heated 2 hrs. at 200° alone or in quinoline yielded 85-90% 2,2-dimethyl-2,3-dihydrothieno[3,2-c]quinoline (II), b0.1 126°. Re-arrangement of I in the presence of 1.5 moles (PrCO)2O gave oily 3-methylallyl-4(1H)-quinolyl thiolobutyrate; picrate, m. 130-1°, hydrolyzed with alkali to give the intermediate 3-methylallyl-4(1H)-quinolinethione (III) m. 134-5°, identical with a sample synthesized by reaction of 3-methylallyl-4-chloroquinoline with H2NCSNH2 in boiling alc. On heating at 160° 30 min., III cyclized quant. to II. Accordingly the 3-allyl-4(1H)-quinolinethiones are the sole intermediates in the thio-Claisen rearrangement of allyl 4-quinolyl sulfides. Propargyl 4-quinolyl sulfide, m. 105-6°, heated 2 hrs. at 200° in PhNH2 yielded 80% 2-methylthieno[3,2-c]quinoline (IV), m. 66-7°, identical with the debromination product of 2-bromomethyl-2,3-dihydrothieno-[3,2-c]quinoline, m. 64.5-66°. The formation of IV in the thermal rearrangement of propargyl 4-quinolyl sulfide is interpreted as a novel 3,3-sigmatropic rearrangement of aryl propargyl sulfide to give the intermediate 3-allyl-4(1H)-quinolinethione, followed by its prototropic cyclization.
 IT 22971-31-9P
 RL: SPN (Synthetic preparation); PREP (Preparation) (preparation of)
 RN 22971-31-9 CAPLUS
 CN Thieno[3,2-c]quinoline, 2-methyl- (8CI, 9CI) (CA INDEX NAME)



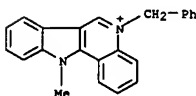
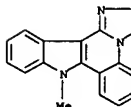
L7 ANSWER 216 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 1969:19931 CAPLUS
 DN 70:19931
 TI Carbazole carboxylates
 IN Hahn, Witold; Nowaczyk, Maria; Bartnik, Romuald; Zawadzka, Halina
 PA Lodzkie Zakłady Farmaceutyczne "Polfa"
 SO Pol., 3 pp.
 CODEN: POXXA7
 DT Patent
 LA Polish
 FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PL 54536		19680308	PL	19650717

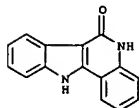
AB A method of preparing derivs. of indole was described, such as: β-(1,2-benzo-3,4-dihydro-9-carbazolyl)propionic acid (I), β-(3-acetyl-1,2-benzo-3,4-dihydro-9-carbolin-9-yl)propionic acid (II), and (1,2,3,4-tetrahydro-9-carbazolyl) acetic acid (III). The derivs. were prepared by the reaction of α-cyanoethylphenylhydrazine (IV) with α-tetralone (V) or 1-acetyl-4-oxo-1,2,3,4-tetrahydroquinoline, or by the reaction of α-cyanomethylphenylhydrazine with hexanone, and by hydrolysis of the reaction products. Thus, IV 161 g., V 146 g., and 96% EtOH 500 ml. was heated to boiling, the mixture was cooled, 100 ml. concentrated HCl was dropped in and the mixture heated another 0.5 hr. to give 171 g. 9-(β-cyanoethyl)-1,2-benzo-3,4-dihydrocarbazole (VI), m. 154-5°. VI 272.3 g., KOH 400 g., and 75% MeOH 4 l. were heated to boiling 12 hrs. to give 88% I, m. 188-90°. Similarly, II m. 219-22° and III, m. 176-7° were obtained.
 IT 21144-92-3P
 RL: SPN (Synthetic preparation); PREP (Preparation) (preparation of)
 RN 21144-92-3 CAPLUS
 CN 11H-Indolo[3,2-c]quinoline-11-propionic acid, 5-acetyl-5,6-dihydro- (8CI) (CA INDEX NAME)



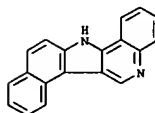
L7 ANSWER 217 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 1968:443824 CAPLUS
 DN 69:43824
 TI Acylindoles. I. Synthesis and transformations of 3-(2-aminobenzoyl)indoles
 AU Garcia, E. E.; Riley, J. G.; Fryer, R. Ian
 CS Chem. Res. Dep., Hoffmann-La Roche, Inc., Nutley, NJ, USA
 SO Journal of Organic Chemistry (1968), 33(7), 2868-74
 CODEN: JOCEAH; ISSN: 0022-3263
 DT Journal
 LA English
 OS CASREACT 69:43824
 GI For diagram(s), see printed CA Issue.
 AB The acidcatalyzed rearrangement of appropriately substituted 3-(2-aminobenzoyl)indoles and 5-(3-indolyl)-2,3-dihydro-1,4-benzodiazepines resulted in the formation of indolo[3,2-c]quinolines, 3-(2-aminophenyl)-4-(1H)-quinolones (I), and an imidazo [1,2-a]-indolo[3,2-c]quinoline (II). An independent synthesis of I is described. The requisite indolylbenzodiazepines were prepared from the corresponding 3-(2-fluorobenzoyl)indoles by treatment with ethylenediamine. 15 references.
 IT 16273-34-0P 16273-91-9P
 RL: SPN (Synthetic preparation); PREP (Preparation) (preparation of)
 RN 16273-34-0 CAPLUS
 CN 3H-Imidazo[1,2-a]indolo[3,2-c]quinoline, 2,9-dihydro-9-methyl- (8CI) (CA INDEX NAME)
 RN 16273-91-9 CAPLUS
 CN 11H-Indolo[3,2-c]quinolinium, 5-benzyl-11-methyl-, chloride (8CI) (CA INDEX NAME)

● Cl⁻

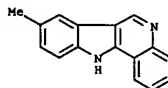
L7 ANSWER 218 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 1968:435990 CAPLUS
 DN 69:35990
 TI Reactions of indole derivatives. IX. Photochemical
 cyclodehydrogenations
 in the indole series
 AU Winterfeldt, E.; Altmann, H. J.
 CS Tech. Univ., Berlin, Fed. Rep. Ger.
 SO Angewandte Chemie, International Edition in English (1968),
 7(6), 466-7
 CODEN: ACIEAY; ISSN: 0570-0833
 DT Journal
 LA English
 GI For diagram(s), see printed CA Issue.
 AB The photochem. cyclodehydrogenation of α - and β -
 indolecarboxylic acid anilides yielded 7H-indolo[2,3-c]quinolin-6(5H)-one
 (I) and 11H-indolo[3,2-c]quinolin-6(5H)-one (II), resp.
 IT 18735-98-3P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation of)
 RN 18735-98-3 CAPLUS
 CN 6H-Indolo[3,2-c]quinolin-6-one, 5,11-dihydro- (8CI, 9CI) (CA INDEX NAME)



L7 ANSWER 219 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 1968:434402 CAPLUS
 DN 69:34402
 TI The effect of benzocarbazoles and benzacridines on the paralyzing action
 of zoxazolamine; structure/activity relations
 AU Buu-Hoi, N. P.; Hien-Do-Phuoc
 CS Inst. Radium, Paris, Fr.
 SO Biochemical Pharmacology (1968), 17(7), 1227-36
 CODEN: BCPAC6; ISSN: 0006-2952
 DT Journal
 LA English
 AB A large number of polycyclic carbazoles and acridines and similar
 N-containing
 heterocycles exhibit a high degree of activity as reducers of
 zoxazolamine-produced paralysis in young rats, most probably through
 stimulation of zoxazolamine hydroxylase synthesis. This activity is not
 necessarily linked to the presence of carcinogenicity, although certain
 relations between structure and activity (e.g., in respect to mol.
 dimensions, π -electron densities, nature and site of substituents,
 lipid solubility) are very similar for both types of biol. effect. 17
 references.
 IT 4240-63-5 4295-30-1 4295-33-4
 4295-49-2
 RL: BIOL (Biological study)
 (zoxazolamine hydroxylase response to)
 RN 4240-63-5 CAPLUS
 CN 13H-Benz[4,5]indolo[3,2-c]quinoline (7CI, 8CI, 9CI) (CA INDEX NAME)

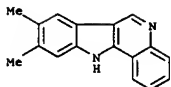


RN 4295-30-1 CAPLUS
 CN 11H-Indolo[3,2-c]quinoline, 8-methyl- (7CI, 8CI) (CA INDEX NAME)

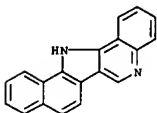


RN 4295-33-4 CAPLUS
 CN 11H-Indolo[3,2-c]quinoline, 8,9-dimethyl- (7CI, 8CI, 9CI) (CA INDEX NAME)

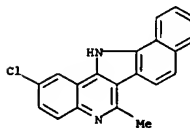
L7 ANSWER 219 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



RN 4295-49-2 CAPLUS
 CN 13H-Benz[6,7]indolo[3,2-c]quinoline (7CI, 8CI, 9CI) (CA INDEX NAME)

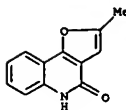


L7 ANSWER 220 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 1968:58949 CAPLUS
 DN 68:58949
 TI Electron impact fragmentation of some polycyclics bearing two or three
 nitrogen heteroatoms
 AU Buu-Hoi, N. P.; Jacquignon, Pierre; Roussel-Perin, Odette; Perin,
 Francois; Mangane, Michel
 CS C.N.R.S., Gif-sur-Yvette, Fr.
 SO Journal of Heterocyclic Chemistry (1967), 4(3), 415-16
 CODEN: JHTCAD; ISSN: 0022-152X
 DT Journal
 LA English
 GI For diagram(s), see printed CA Issue.
 AB Electron impact fragmentation patterns of N heterocycles containing 2-3 N
 atoms and 2-4 rings are reported. Compds. used are benzo-2,1,3-
 selenadiazole, phenanthro 1,2-d]-2,1,3 - selenadiazole (I), 9,10 -
 dimethyldibenzo b,h] 1,6]naphthyridine, 2-chloro-6-methyldibenzo b,h]
 1,6]naphthyridine, 2-chloro-6-methyl-13H-dibenzo a,l]- γ -carboline,
 and 11H-pyrido 2,3-l]- γ -carboline.
 IT 4240-59-9
 RL: PRP (Properties)
 (mass spectrum of)
 RN 4240-59-9 CAPLUS
 CN 13H-Benz[6,7]indolo[3,2-c]quinoline, 2-chloro-6-methyl- (7CI, 8CI) (CA INDEX NAME)

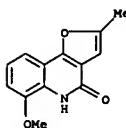


L7 ANSWER 221 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 1968:39866 CAPLUS
 DN 68:39866
 TI Chemistry of natural substances. VII. Furoquinoline derivatives by
 condensation of ethyl 2-propynyl malonate with aromatic amines
 AU Reisch, Johannes
 CS Westfael. Wilhelms-Univ., Muenster, Fed. Rep. Ger.
 SO Archiv der Pharmazie und Berichte der Deutschen Pharmazeutischen
 Gesellschaft (1967), 300(6), 533-9
 CODEN: APBDAJ; ISSN: 0376-0367
 DT Journal
 LA German
 OS CASREACT 68:39866
 GI For diagram(s), see printed CA Issue.
 AB Under the reaction conditions which are stated by Baker, Lappin, and
 Riegel (1946) for the preparation of 3-substituted
 4-hydroxyquinolin-2-one,
 malonic acid diarylamides and not 4-hydroxyquinolinones were obtained.
 By
 variation of the synthesis from prop-2-ynylmalonic ester and PhNH₂ or
 MeOC₂H₄NH₂ resp. 5'-methylindictamine and 5'-methylorpseudodictamine
 or 5'-methylorpagarine (Ia) and 5'-methylorpseudofagarine (Ib) resp.
 were prepared (Method A) A mixture of 11 g. di-Et prop-2-ynylmalonate
 (I) and
 4.7 g. PhNH₂ in 25 ml. Ph₂O were refluxed 1 hr. to give 66%
 prop-2-ynylmalonic acid (II) dianilide (IIa), m. 217° (EtOH).
 (Method B). To 3.8 g. freshly distilled PhNH₂ in 150 ml. absolute Et₂O
 was
 dropped 2 g. prop-2-ynylmalonic acid dichloride in 20 ml. Et₂O with
 stirring and ice cooling to obtain 90% IIa. According to method A was
 prepared 48% of the corresponding di-O-aniside, m. 147° (EtOH) of
 II: 54% of the cyclohexylmalonic acid (III) dianilide, m. 303°
 (EtOH) and from 6.65 g. di-Et cyclohexylmalonate (IV) and 3.1 g.
 p-MeOC₆H₄NH₂, 3 g. di-p-aniside derivative, m. 289-90° (EtOH) of III,
 beside 1 g. p-aniside Et ester derivative, m. 158-60° (aqueous EtOH) of
 III. Heating 6 g. di-Et propylmalonate and 6 g. PhNH₂ 1 hr. at
 190-200° gave 50% propylmalonic acid dianilide (V), m. 200°
 (EtOH). Hydrogenation of IIa in 80% MeOH at 0° and 760 mm. gave V
 quant. A mixture of 6.65 g. IV and 2.32 g. PhNH₂ in 12.5 ml. Ph₂O was
 heated on the descending cooler until 2.5 ml. EtOH was distilled to give
 83%
 3-cyclohexyl-4-hydroxy-2(1H)-quinolinone (VI), m. 238-4° (EtOH).
 Analogously prepared were 90% 6-methoxy derivative m. 235-6° (EtOH), of
 VI, and 3-propyl-4-hydroxy-2(1H)-quinolinone, m. 235°. A mixture of
 22 g. I and 9.3 g. PhNH₂ in 50 ml. was heated on the descending cooler
 until 10 ml. EtOH was distilled to obtain 74%
 2-methylfuro[3,2-c]quinolinone
 (VII), identified by ir spectroscopy. Also obtained was 16%
 2-methylfuro[2,3-b]quinolin-4-one (VIII), m. 275° (HCONMe₂H₂O).
 Analogously were prepared 74% Ib m. 248-52° (sublimes), and 13.5% Ia,
 m. 261°.
 IT 17889-88-2P 17889-90-6P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation of)
 RN 17889-88-2 CAPLUS
 CN Furo[3,2-c]quinolin-4(5H)-one, 2-methyl- (8CI, 9CI) (CA INDEX NAME)

L7 ANSWER 221 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

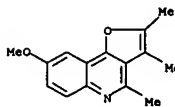


RN 17889-90-6 CAPLUS
 CN Furo[3,2-c]quinolin-4(5H)-one, 6-methoxy-2-methyl- (8CI) (CA INDEX NAME)



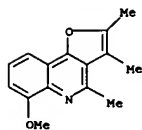
L7 ANSWER 222 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 1967:46267 CAPLUS
 DN 67:46267
 TI Benzofurans. XXIII. Preparation of hydroxylated derivatives of
 furo[4,3-b]-, -[g]-, or -[h]quinolines from 4(5,6, or 7)-amino- and 4(5,6, or
 7)-methoxy-2,3-dimethylbenzofurans
 AU Royer, Rene; Demersman, Pierre; Pene, Cecile; Colin, Genevieve
 CS Inst. Radium, Paris, Fr.
 SO Bulletin de la Societe Chimique de France (1967), (3), 915-22
 CODEN: BSCFAS; ISSN: 0037-8968
 DT Journal
 LA French
 OS CASREACT 67:46267
 GI For diagram(s), see printed CA Issue.
 AB cf. CA 67: 43774f. Comps. of the general formulas I, II, III, and IV
 prepared Thus, 4(5,6, and 7)-acetyl-2,3-dimethylbenzofurans are
 oxidized to
 give the following V (R, R₁, R₂, R₃, m.p., and % yield given): C:(NOH)Me,
 H, H, H, 155°, 74.5; MeO, H, H, C:(NOH)Me, 227°, 76.5; H,
 MeO, C:(NOH)Me, H, 178°, 86.5; H, C:(NOH)Me, MeO, H, 191°,
 91.5; C:(NOH)Me, H, H, MeO, 132°, 81; MeO, H, C:(NOH)Me, MeO,
 152°, 90; C:(NOH)Me, H, MeO, MeO, 159°, 92. A mixture of V
 [R₁ = R₂ = H, R = MeO, R₃ = C:(NOH)Me] and PCl₅ is kept at room
 temperature to
 give V (R₁ = R₂ = H, R = MeO, R₃ = AcNH) (VI), m. 190.5°.
 Similarly prepared are the following V (R, R₁, R₂, R₃, and m.p. given):
 H,
 MeO, AcNH, H, 164.5°; H, AcNH, MeO, H, 194°; AcNH, H, H,
 MeO, 196°; MeO, H, AcNH, MeO, 172°; AcNH, H, MeO, MeO,
 174.5°; AcNH, H, H, H, 176°. V (R = MeO, R₁ = R₂ = R₃ = H)
 (1 mole) is treated with 1.5 moles HNO₃ to give V (R = MeO, R₁ = NO₂, R₂
 =
 R₃ = H) (VII), m. 160°. Similarly prepared are the following V (R,
 R₁, R₂, R₃, and m.p. given): H, MeO, NO₂, H, 146°; NO₂, H, H, MeO,
 86°; MeO, H, NO₂, 127°; NO₂, H, MeO, MeO, 125°. VII
 is hydrolyzed to give 7-amino-4-methoxy-2,3-dimethylbenzofuran (VIII),
 b.p. 130°, m. 71°. Similarly prepared are the following V (R,
 R₁, R₂, R₃, b.p./mm., and m.p. given): H, MeO, NH₂, H, -, -, H, NH₂, MeO,
 H, -, 124°; NH₂, H, H, MeO, -, -, MeO, H, NH₂, MeO, -, -. A mixture
 of 1 mole VII, 4 moles SnCl₂, and HCl is refluxed 1 hr. to give V (R =
 MeO,
 R₁ = NH₂, R₂ = R₃ = H), b.p. 140-3°, m. 83°. Similarly
 prepared are the following V (R, R₁, R₂, R₃, b.p./mm., and m.p. given):
 H,
 MeO, NH₂, H, 184°/17, 64.5°; NH₂, H, H, MeO,
 148-50°/4, 133°; MeO, H, NH₂, MeO, 155°/0.4,
 80°; NH₂, H, MeO, MeO, -, 160°. A mixture of 11 g. VIII, 25.8
 g. glycerol, 22 g. PhNO₂, and 4.65 ml. H₂SO₄ (d. 1.83) is heated 2 hrs.
 at
 135-40° to give 2,3-dimethyl-4-methoxyfuro[3,2-h]-quinoline (IX),
 m. 98°. Similarly prepared are (m.p. given): 2,3-dimethyl-5-
 methoxyfuro[2,3-f]quinoline, 137.5°; 1,2-dimethyl-5-methoxy-
 furo[3,2-f]quinoline, 133°; 1,2-dimethyl-4-methoxyfuro[2,3-
 h]quinoline, 76.5°. A mixture of 10 g. V (R = R₁ = R₂ = H, R₃ =
 NH₂), 6.8 g. AcCH₂CO₂Et, 25 ml. CH₂Cl₂, and a small amount of HCl is
 kept 36
 hrs. at 15° to give an azomethine; a mixture of the azomethine and
 175 ml. Ph₂O is heated to give III (R = Me, R₁ = OH, R₂ = H), m.
 360°. Similarly prepared are (m.p. given): I (R = Me, R₁ = OH, R₂ =
 H), 355°; II (R = Me, R₁ = OH, R₂ = H), 368°; III (R = Me,

L7 ANSWER 222 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)
 R₁ = OH, R₂ = MeO), 330°; II (R = Me, R₁ = OH, R₂ = MeO),
 330°; I (R = Me, R₁ = OH, R₂ = MeO), 274°; IV (R = Me, R₁ =
 OH, R₂ = MeO), 248°; 2,3,6-trimethyl-4,9-dimethoxy-5-hydroxyfuro-
 [3,2-g]quinoline, 272°. A mixt. of IX and HBr is refluxed 4 hrs.
 to give 2,3-dimethyl-4-hydroxyfuro[3,2-h]quinoline, m. 312°.
 Similarly prepd. are (m.p. given): II (R = R₁ = H, R₂ = OH),
 132.5°; I (R = R₁ = H, R₂ = OH), 171.5°; IV (R = R₁ = H, R₂ =
 OH), 236°; III (R = Me, R₁ = R₂ = OH), 375°; II (R = Me, R₁ =
 R₂ = OH), 320°; I (R = Me, R₁ = R₂ = OH), 275°; IV (R =
 Me, R₁ = R₂ = OH), 2375°. A mixt. of 1 mole X (R = R₃ = H, R₁ =
 OH, R₂ = MeO) and 3 moles MeCHCl₂ is heated 48 hrs. to give X (R = R₃ =
 H, R₁ = MeCHCHO, R₂ = MeO), m. 81°. Similarly prepd. are (m.p.
 given): X (R = R₂ = H, R₁ = MeCHCHO, R₃ = MeO), 146°; I (R₂ = H, R
 = Me, R₁ = MeCHCHO), 161°; II (R₂ = H, R = Me, R₁ = MeCHCHO),
 175°. The crotyl ethers, X (R = R₃ = H, R₁ = 2-butenyloxy, R₂ =
 MeO) [m. 170-205° (decompn.)] and X (R = R₂ = H, R₁ = 2-butenyloxy,
 R₃ = MeO) [m. 101°], are prepd. from the X (R₁ = OH) according to
 Makisumi (CA 61: 9461d). Mixts. contg. the crotyl ethers and PhNH₂ are
 refluxed 2 hrs. to give the following compds. (m.p. given): X (R =
 1-methylallyl), R₁ = OH, R₂ = H, R₃ = MeO), 225°. Cyclization of
 the X (R = 1-methylallyl) compds. gives the following compds. (b.p./mm.
 and m.p. given):
 2,3-dihydro-2,3,4-trimethyl-8-methoxyfuro[3,2-c]quinoline
 (XI), 170°/0.35, 136°; 2,3-dihydro-2,3,4-trimethyl-6-
 methoxyfuro[3,2-c]quinoline (XII), -, 119°. XI and XII are heated
 10 min. at 240-5° with 8 to give 2,3,4-trimethyl-8-methoxyfuro[3,2-
 c]quinoline (b.p. 3 180°, m. 117°) and 2,3,4-trimethyl-6-
 methoxyfuro[3,2-c]quinoline (m. 200°), resp. A mixt. of 1.7 g. II
 (R = R₁ = H, R₂ = OH), 1.1 ml. AcCH₂CO₂Et, and 10 ml. H₂SO₄ (d. 1.83) is
 kept 72 hrs. to give 4,5,6-trimethylfuro[2,3-f]-2-pyrone[5,6-h]quinoline,
 m. 290°.
 IT 15309-20-3P 15309-21-4P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation of)
 RN 15309-20-3 CAPLUS
 CN Furo[3,2-c]quinoline, 8-methoxy-2,3,4-trimethyl- (8CI, 9CI) (CA INDEX NAME)



RN 15309-21-4 CAPLUS
 CN Furo[3,2-c]quinoline, 6-methoxy-2,3,4-trimethyl- (8CI) (CA INDEX NAME)

L7 ANSWER 222 OF 273 CAPLUS COPYRIGHT 2005 ACS ON STN (Continued)

L7 ANSWER 223 OF 273 CAPLUS COPYRIGHT 2005 ACS ON STN
AN 1967:75925 CAPLUS
DN 66:75925T1 Cycloparaffins condensed with heterocyclic rings. V. Attempts at the synthesis of some 1,2,3,4-tetrahydro- and 1,2-benzo-3,4-dihydro- α -carboline derivativesAU Hahn, Witold E.; Bartnik, Romuald; Zawadzka, Halina
CS Univ. Lodz, Lodz, Pol.

SO Lodzkie Towarzystwo Naukowe, Wydział III, Acta Chimica (1966), 11, 83-90

CODEN: LTNCAL

DT Journal
LA English

GI For diagram(s), see printed CA Issue.

AB cf. CA 66, 75869m. N-Substituted γ -carbolines (I and II) are prepared by treatment of phenylhydrazine (III) or α -(2-cyanoethyl)-phenylhydrazine (IV) with heterocyclic ketones in the presence of HCl. Thus, 29 g. III.HCl, 30 g. N-methyl- γ -piperidone hydrochloride (V), and 500 ml. EtOH saturated with HCl was boiled for 3 hrs. and cooled for

20 hrs. to give 74% I (R = H, R' = Me), m. 168-70° (MeOH-H₂O). Attempts to cyanoethylate I (R = H, R' = Me) with acrylonitrile or IV or carboxymethylate it with methyl acrylate were unsuccessful. Treatment of IV and V gave 1-phenyl-3-iminopyrazolidone (VI), m. 162-5° (MeOH). When a mixture of 7.4 g. 4-oxo-1,2,3,4-tetrahydroquinoline (VII), 7.3 g. III.HCl, and 120 ml. absolute EtOH was saturated with HCl gas and heated 1 hr. on a water bath, II (R = R' = H) was obtained, m. 339-42° (decomposition) (EtOH-H₂O). Reaction of II (R = R' = H) with Ac₂O was unsuccessful. II (R = CH₂CH₂CO₂H, R' = H) was prepared by adding 2 ml. concentrated HCl to a mixture of 3.2 g. IV and 2.95 g. VII in 10 ml. EtOH. The solution was boiled 1.5 hrs. cooled, made alkaline with ethanolic NaOH, salts formed, removed, and the filtrate concentrated in vacuo. After 2 days the oil was dissolved in 150 ml. MeOH, 22 g. KOH in 20 ml. H₂O added, and the solution heated for 12 hrs.

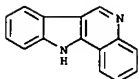
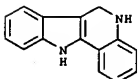
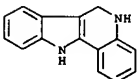
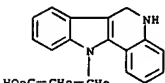
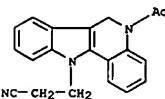
on a water bath to give II (R = CH₂CH₂CO₂H, R' = H), m. 219-20° (MeOH-H₂O). II (R = CH₂CH₂CH₃, R' = Ac), m. 170-4° (MeOH-H₂O), was prepared by boiling for 1 hr. a mixture of 2.9 g. 1-acetyl-4-oxo-1,2,3,4-tetrahydroquinoline, 2.4 g. IV, 1.5 ml. concentrated HCl, and 5 ml. EtOH.

IT 239-09-8DP, 11H-Indolo[3,2-c]quinoline, derivs.
13624-03-8DP, 5H-Indolo[3,2-c]quinoline, 6,11-dihydro-, derivs.RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)

RN 239-09-8 CAPLUS

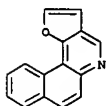
CN 11H-Indolo[3,2-c]quinoline (6CI, 7CI, 8CI, 9CI) (CA INDEX NAME)

L7 ANSWER 223 OF 273 CAPLUS COPYRIGHT 2005 ACS ON STN (Continued)

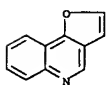
RN 13624-03-8 CAPLUS
CN 5H-Indolo[3,2-c]quinoline, 6,11-dihydro- (8CI) (CA INDEX NAME)RN 13624-03-8 CAPLUS
CN 5H-Indolo[3,2-c]quinoline, 6,11-dihydro- (8CI) (CA INDEX NAME)RN 13799-48-9 CAPLUS
CN 11H-Indolo[3,2-c]quinoline-11-propionic acid, 5,6-dihydro- (8CI) (CA INDEX NAME)RN 15065-67-5 CAPLUS
CN 11H-Indolo[3,2-c]quinoline-11-propionitrile, 5-acetyl-5,6-dihydro- (8CI) (CA INDEX NAME)

L7 ANSWER 223 OF 273 CAPLUS COPYRIGHT 2005 ACS ON STN (Continued)

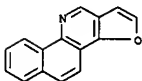
L7 ANSWER 224 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 1966:448394 CAPLUS
 DN 65:48394
 OREF 65:9097c-d
 TI Inhibition of the oxidation of polymers by some free radicals
 AU Yasina, L. L.; Shapiro, A. B.; Rozantsev, E. G.
 SO Plasticheskie Massy (1966), (6), 37-9
 CODEN: PLMSAI; ISSN: 0554-2901
 DT Journal
 LA Russian
 AB cf. CA 64, 830a. The antioxidative properties of 8 paramagnetic derivs. of hydrogenated carboline and quinoline were characterized by the time of the induction period of O adsorption by polypropylene (I) and polyformaldehyde. The exptl. data are presented in graphs and discussed in terms of the mechanism of inhibition and of differences in the inhibiting activity of the derivs. The E.P.R. measurements showed that free radicals were spent during the induction period of the thermal oxidation of I with the end of the period coinciding with the disappearance of the E.P.R. signal.
 IT 195-66-4, Benzo[f]furo[3,2-c]quinoline 234-07-1, Furo[3,2-c]quinoline (spiro derivs.)
 RN 195-66-4 CAPLUS
 CN Benzo[f]furo[3,2-c]quinoline (8CI, 9CI) (CA INDEX NAME)



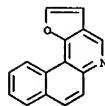
RN 234-07-1 CAPLUS
 CN Furo[3,2-c]quinoline (8CI, 9CI) (CA INDEX NAME)



L7 ANSWER 225 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

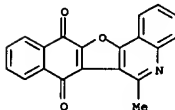


L7 ANSWER 225 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 1966:92646 CAPLUS
 DN 64:92646
 OREF 64:17365g-h,17366d
 TI Free nitroxyl radicals based on benzoquinolines
 AU Pozarov, L. S.; Shapiro, A. B.; Rozantsev, E. G.
 CS N. D. Zelinskii Inst. Org. Chem., Moscow
 SO Izvestiya Akademii Nauk SSSR, Seriya Khimicheskaya (1966), (2), 339-41
 CODEN: IASKA6; ISSN: 0002-3353
 DT Journal
 LA Russian
 AB Refluxing 1-C10H7NH2 with cyclohexanone in C6H6 with removal of H2O gave 59% cyclohexylidene- α -naphthylamine, m. 58-9°; β -isomer, b.p. 5 138-40°, n_D20 1.6320. These in C6H6 were treated with catalytic amount of BF3.Et2O followed by 2-methyl-4,5-dihydrofuran (exothermic) and gave after 1 hr. followed by treatment with aqueous NaOH, 63.4% 4-methyl-2-spirocyclohexyl-3,4:3',2'-tetrahydro 5,6-benzofurano-1,2,3,4-tetrahydroquinoline, m. 121-2° b.p. 200-4°, and 30% 4-methyl-2-spirocyclohexyl-3,4:3',2'-tetrahydro 7,8-benzofurano-1,2,3,4-tetrahydroquinoline, b.p. 1 213-20°, resp. These treated in MeOH with 30% H2O2 in the presence of Trilon B and Na2WO4 1 day at room temperature, then concentrated and extracted with C6H6, gave on evaporation of the extract 42.9% red 4-methyl-2-spirocyclohexyl-3,4:3',2'-tetrahydro-5,6-benzofurano-1,2,3,4-tetrahydroquinolin-1-oxyl radical, m. 147-8° (MeOH), and the 7,8-benzo analog, red oil. E.P.R. signals shown. The fine structures of the signals of these radicals with similar and consisted of triplets caused by interaction of the odd electron with N nucleus; the component splitting in the triplet was 11.6 oe.
 IT 195-66-4, Benzo[f]furo[3,2-c]quinoline 316-28-9, Benzo[h]furo[3,2-c]quinoline (spiro derivs.)
 RN 195-66-4 CAPLUS
 CN Benzo[f]furo[3,2-c]quinoline (8CI, 9CI) (CA INDEX NAME)

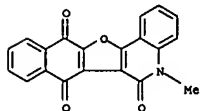


RN 316-28-9 CAPLUS
 CN Benzo[h]furo[3,2-c]quinoline (8CI, 9CI) (CA INDEX NAME)

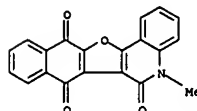
L7 ANSWER 226 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 1966:19249 CAPLUS
 DN 64:19249
 OREF 64:3511c-e
 TI A new heterocyclic structure of the benzofuranopyrone type
 AU Deschamps-Vallet, Colette; Mentzer, Charles
 CS Museum Natl. Hist. Nat., Paris
 SO Compt. Rend. (1965), 261(10(Groupe 8)), 2113-16
 DT Journal
 LA French
 CS CASREACT 64:19249
 GI For diagram(s), see printed CA Issue.
 AB To a solution of 1.89 g. 6-methyl-4-hydroxy- α -pyrone (I), 1.5 g. pyrocatechine, and 6 g. NaOAc in 40 ml. Me2CO-H2O (1:1) was added a solution of 1.4 g. KI and 3 g. NaOAc in 25 ml. H2O to yield 5,6-dihydroxy-2,3-(6'-methyl-3',4'- α -pyrono)benzofuran (II), m. 330°; diacetyl derivative m. 183° (MeOH-AcOEt). II was shown to be a Wanzlick (W., et al., CA 60, 15693b) type condensation product from N.M.R. studies and from the reaction of the compound with α -dichlorodiphenylmethane (III) at 200° for 5 min. Cooling and precipitating with Me2CO gave 5,6-diphenylmethylenedioxy-2,3-(6'-methyl-3',4'- α -pyrono) benzofuran (IV), m. 178°. Similar treatment of the 6-phenyl analog of I gave the phenyl analog of II, m. 335° (diacetyl derivative m. 213°), which, on treatment with III gave the phenyl analog of IV, m. 253°. These reactions indicate an enolic structure for I.
 IT 4880-46-0, Naphtho[2',3':4,5]furo[3,2-c]quinoline-7,12-dione, 6-methyl- (preparation of)
 RN 4880-46-0 CAPLUS
 CN Naphtho[2',3':4,5]furo[3,2-c]quinoline-7,12-dione, 6-methyl- (7CI, 8CI) (CA INDEX NAME)



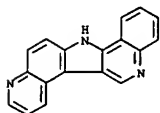
L7 ANSWER 227 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 1966:19247 CAPLUS
 DN 64:19247
 OREF 64:3511a-c
 TI Oxygen heterocycles. XII. Synthesis of new polycyclic furans by means of 2,3-dichloro-1,4-naphthaquinone
 AU Buu-Hoi, N. P.; Hoeffinger, J. P.; Jacquignon, P.
 CS C.N.R.S., Gif-sur-Yvette, Fr.
 SO Journal of the Chemical Society, Abstracts (1965), (Nov.), 6105-6
 CODEN: JCSAAZ; ISSN: 0590-9791
 DT Journal
 LA English
 GI For diagram(s), see printed CA Issue.
 AB cf. CA 64, 3462a. The synthesis of a number of quinonoid polycyclic furans (e.g., I, II, III, and IV), by condensation of 2,3-dichloro-1,4-naphthaquinone with phenols, is described.
 IT 5317-64-6, Naphtho[2',3':4,5]furo[3,2-c]quinoline-6,7,12-(5H)-trione, 5-methyl- (preparation of)
 RN 5317-64-6 CAPLUS
 CN Naphtho[2',3':4,5]furo[3,2-c]quinoline-6,7,12(5H)-trione, 5-methyl- (7CI, 8CI) (CA INDEX NAME)



L7 ANSWER 228 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 1966:19246 CAPLUS
 DN 64:19246
 OREF 64:3510g-h,3511a
 TI Complete structure of ryanodine
 AU Santroch, J.; Valenta, Z.; Wiesner, K.
 CS Univ. New Brunswick, Can.
 SO Experientia (1965), 21(12), 730-1
 CODEN: EXPEAM; ISSN: 0014-4754
 DT Journal
 LA English
 GI For diagram(s), see printed CA Issue.
 AB Further evidence indicates another possibility for the structure of ryanodine (Babin, et al., CA 63, 13335c). Ryanodol (II) (pK = 11.8-12) gave a monomethyl derivative (II) by treatment with aqueous alkali and Me2SO4.
 II lost MeOH on treatment with aqueous acid yielding anhydroryanodol.
 Two structures for I fit this evidence (Ia and Ib). Ib explains several rigorously established degradation series in a much simpler manner than does Ia. However, previous interpretations of N.M.R. data and the isoryanodol series are incompatible with Ib.
 IT 5317-64-6, Naphtho[2',3':4,5]furo[3,2-c]quinoline-6,7,12-(5H)-trione, 5-methyl- (preparation of)
 RN 5317-64-6 CAPLUS
 CN Naphtho[2',3':4,5]furo[3,2-c]quinoline-6,7,12(5H)-trione, 5-methyl- (7CI, 8CI) (CA INDEX NAME)



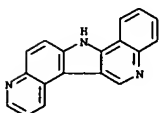
L7 ANSWER 229 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 1965:498262 CAPLUS
 DN 63:98262
 OREF 63:18058g-h
 TI Carcinogenic nitrogen compounds. XLVIII. Benzo[b]carbazoles, carbazolocarbazoles, and carbazolocridines from carbazole
 AU Buu-Hoi, N. P.; Saint-Ruf, G.
 CS C.N.R.S., Gif-sur-Yvette, Fr.
 SO Journal of the Chemical Society, Abstracts (1965), (Oct.), 5464-7
 CODEN: JCSAAZ; ISSN: 0590-9791
 DT Journal
 LA English
 AB Homologs of 5H-benzo[b]carbazole were synthesized by application of the succinic anhydride method to 9-ethylcarbazole via 5-ethyl-7,8,9,10-tetrahydro-5-oxo 5H benzo[b]carbazole; this intermediate served also for the preparation of carbazolocarbazoles and carbazolocridines, which represent novel types of heterocycles.
 IT 4240-73-7, 7H-Pyrrolo[3,2-c:4,5-f']diquinoline 4240-74-8, 7H-Pyrrolo[3,2-c:4,5-f']diquinoline, picrate (preparation of)
 RN 4240-73-7 CAPLUS
 CN 7H-Pyrrolo[3,2-c:4,5-f']diquinoline (7CI, 8CI) (CA INDEX NAME)



RN 4240-74-8 CAPLUS
 CN 7H-Pyrrolo[3,2-c:4,5-f']diquinoline, picrate (8CI) (CA INDEX NAME)

CM 1

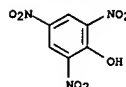
CRN 4240-73-7
 CMF C18 H11 N3



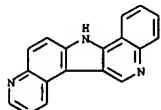
CM 2

CRN 88-89-1
 CMF C6 H3 N3 O7

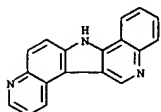
L7 ANSWER 229 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



L7 ANSWER 230 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 1965:498261 CAPLUS
 DN 63:98261
 OREF 63:18058g
 TI Carcinogenic nitrogen compounds. XLVII. γ -Carbolines and 2,10-diazanthracenes isosteric with benzocarbazoles and benzacridines
 AU Roussel, Odette; Buu-Hoi, N. P.; Jacquignon, P.
 CS C.N.R.S., Gif-sur-Yvette, Fr.
 SO Journal of the Chemical Society, Abstracts (1965), (Oct.), 5468-64
 CODEN: JCSAAZ; ISSN: 0590-9791
 DT Journal
 LA English
 AB cf. CA 63, 14783h. The synthesis was investigated of a number of benzo, dibenzo, and pyrido derivatives of γ -carboline and 2,10-diazanthracene which are structurally related to the carcinogenic angular benzocarbazoles, dihenzocarbazoles, and benz[c]acridines.
 IT 4240-73-7, 7H-Pyrrolo[3,2-c:4,5-f']diquinoline 4240-74-8, 7H-Pyrrolo[3,2-c:4,5-f']diquinoline, picrate (preparation of)
 RN 4240-73-7 CAPLUS
 CN 7H-Pyrrolo[3,2-c:4,5-f']diquinoline (7CI, 8CI) (CA INDEX NAME)

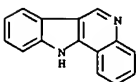


RN 4240-74-8 CAPLUS
 CN 7H-Pyrrolo[3,2-c:4,5-f']diquinoline, picrate (8CI) (CA INDEX NAME)
 CM 1
 CRN 4240-73-7
 CMF C18 H11 N3



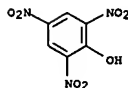
CM 2
 CRN 88-89-1

L7 ANSWER 231 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 1965:498260 CAPLUS
 DN 63:98260
 OREF 63:18058e-g
 TI Indolothiopyrylium compounds. I. Benz[b]indolo[2,3-d]-thiopyrylium perchlorates. A novel heteroaromatic ring system
 AU Young, Thomas E.; Scott, Peter H.
 CS Lehigh Univ., Bethlehem, PA
 SO Journal of Organic Chemistry (1965), 30(11), 3613-17
 CODEN: JOCEAH; ISSN: 0022-3263
 DT Journal
 LA English
 OS CASREACT 63:98260
 GI For diagram(s), see printed CA Issue.
 AB Abstraction of a hydride ion from C-6 of 6,11-dihydrobenz[b]-indolo[2,3-d]thiopyran (I) with trityl perchlorate gave an 88% yield of benz[b]indolo[2,3-d]thiopyrylium perchlorate (II), and the 2-chloro-, 2-nitro-, and 2-, 8-, and 11-methyl-(III) analogs, resp., were similarly obtained in yields of 84-99%. The parent perchlorate salt II underwent ready metathesis with KI to form the corresponding thiopyrylium iodide. N.M.R. spectral evidence suggested that the positive charge in these cations is localized predominantly on the S atom rather than on the conjugated N atom. Reaction of the N-Me compound III with PhMgBr gave an adduct which were rearomatized with trityl perchlorate to 11-methyl-6-phenylbenz[b]indolo[2,3-d]thiopyrylium perchlorate (IV).
 IT 239-09-8, 11H-Indolo[3,2-c]quinoline (derivs.)
 RN 239-09-8 CAPLUS
 CN 11H-Indolo[3,2-c]quinoline (6CI, 7CI, 8CI, 9CI) (CA INDEX NAME)

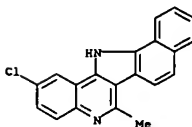


IT 4240-59-9, 13H-Benz[6,7]indolo[3,2-c]quinoline, 2-chloro-6-methyl-4240-60-2, 13H-Benz[6,7]indolo[3,2-c]quinoline, 2-chloro-6-methyl-, picrate 4240-61-3, 13H-Benz[6,7]indolo[3,2-c]quinoline, 6-methyl- 4240-62-4, 13H-Benz[6,7]indolo[3,2-c]quinoline, 6-methyl-, picrate 4240-63-5, 13H-Benz[4,5]indolo[3,2-c]quinoline 4240-65-7, 13H-Benz[4,5]indolo[3,2-c]quinoline, dipicrate 4240-66-8, 13H-Benz[4,5]indolo[3,2-c]quinoline, 2-methoxy- 4240-67-9, 13H-Benz[4,5]indolo[3,2-c]quinoline, 2-methoxy-, picrate 4240-69-1, 13H-Benz[4,5]indolo[3,2-c]quinoline, 2-chloro-6-methyl-4240-70-4, 13H-Benz[4,5]indolo[3,2-c]quinoline, 6-methyl- 4240-71-5, 13H-Benz[4,5]indolo[3,2-c]quinoline, 6-methyl- 4240-73-7, 7H-Pyrrolo[3,2-c:4,5-f']diquinoline, 6-methyl-, picrate 4240-74-8, 7H-Pyrrolo[3,2-c:4,5-f']diquinoline, picrate 4295-18-5, 11H-Indolo[3,2-c]quinoline, 6-methyl- 4295-28-7, 11H-Indolo[3,2-c]quinoline, 6-methyl-, picrate 4295-29-8, 11H-Indolo[3,2-c]quinoline, 6-methyl-, picrate 4295-30-1, 11H-Indolo[3,2-c]quinoline, 8-methyl- 4295-32-3, 11H-Indolo[3,2-c]quinoline, 9,10-dimethyl-, dipicrate 4295-33-4, 11H-Indolo[3,2-c]quinoline, 8,9-dimethyl- 4295-34-5, 11H-Indolo[3,2-c]quinoline, 8,9-dimethyl-, picrate 4295-35-6, 11H-Indolo[3,2-c]quinoline, 6,8-dimethyl- 4295-40-3,

L7 ANSWER 230 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)
 CMF C6 H3 N3 O7

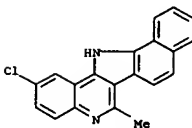


L7 ANSWER 231 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)
 11H-Indolo[3,2-c]quinoline, 6,8-dimethyl-, picrate 4295-41-4, 11H-Indolo[3,2-c]quinoline, 2-chloro-6-methyl- 4295-42-5, 11H-Indolo[3,2-c]quinoline, 2-chloro-6-methyl-, picrate 4295-43-6, 11H-Indolo[3,2-c]quinoline, 2-chloro-6,8-dimethyl- 4295-44-7, 11H-Indolo[3,2-c]quinoline, 2-chloro-6,8-dimethyl-, picrate 4295-45-8, 11H-Indolo[3,2-c]quinoline, 2-methoxy- 4295-46-9, 11H-Indolo[3,2-c]quinoline, 2-methoxy-, picrate 4295-47-0, 11H-Indolo[3,2-c]quinoline, 2-methoxy-8-methyl- 4295-48-1, 11H-Indolo[3,2-c]quinoline, 2-methoxy-8-methyl-, picrate 4295-49-2, 13H-Benz[6,7]indolo[3,2-c]quinoline 4295-50-5, 13H-Benz[6,7]indolo[3,2-c]quinoline, picrate 4366-89-6, 13H-Benz[6,7]indolo[3,2-c]quinoline, 2-methoxy- 4550-98-5, 13H-Benz[6,7]indolo[3,2-c]quinoline, 2-methoxy-, picrate 4618-03-5, 11H-Indolo[3,2-c]quinoline, 9,10-dimethyl- 859042-33-4, 11H-Indolo[3,2-c]quinoline, 8-methyl-, picrate (2:1) (prepn. of)
 RN 4240-59-9 CAPLUS
 CN 13H-Benz[6,7]indolo[3,2-c]quinoline, 2-chloro-6-methyl- (7CI, 8CI) (CA INDEX NAME)



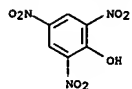
RN 4240-60-2 CAPLUS
 CN 13H-Benz[6,7]indolo[3,2-c]quinoline, 2-chloro-6-methyl-, monopicate (8CI) (CA INDEX NAME)

CM 1
 CRN 4240-59-9
 CMF C20 H13 Cl N2

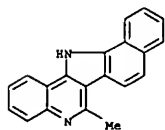


CM 2
 CRN 88-89-1
 CMF C6 H3 N3 O7

L7 ANSWER 231 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



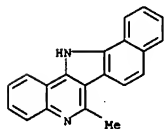
RN 4240-61-3 CAPLUS
CN 13H-Benz[6,7]indolo[3,2-c]quinoline, 6-methyl- (7CI, 8CI) (CA INDEX NAME)



RN 4240-62-4 CAPLUS
CN 13H-Benz[6,7]indolo[3,2-c]quinoline, 6-methyl-, monopicate (8CI) (CA INDEX NAME)

CM 1

CRN 4240-61-3
CMF C20 H14 N2

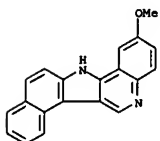


CM 2

CRN 88-89-1
CMF C6 H3 N3 O7

L7 ANSWER 231 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

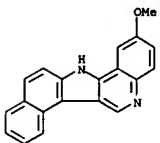
RN 4240-66-8 CAPLUS
CN 13H-Benz[4,5]indolo[3,2-c]quinoline, 2-methoxy- (7CI, 8CI) (CA INDEX NAME)



RN 4240-67-9 CAPLUS
CN 13H-Benz[4,5]indolo[3,2-c]quinoline, 2-methoxy-, monopicate (8CI) (CA INDEX NAME)

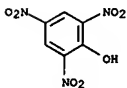
CM 1

CRN 4240-66-8
CMF C20 H14 N2 O



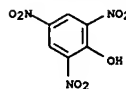
CM 2

CRN 88-89-1
CMF C6 H3 N3 O7

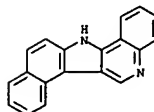


RN 4240-69-1 CAPLUS
CN 13H-Benz[4,5]indolo[3,2-c]quinoline, 2-chloro-6-methyl- (7CI, 8CI) (CA INDEX NAME)

L7 ANSWER 231 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



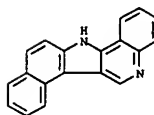
RN 4240-63-5 CAPLUS
CN 13H-Benz[4,5]indolo[3,2-c]quinoline (7CI, 8CI, 9CI) (CA INDEX NAME)



RN 4240-65-7 CAPLUS
CN 13H-Benz[4,5]indolo[3,2-c]quinoline, monopicate (8CI) (CA INDEX NAME)

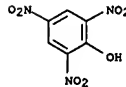
CM 1

CRN 4240-63-5
CMF C19 H12 N2



CM 2

CRN 88-89-1
CMF C6 H3 N3 O7

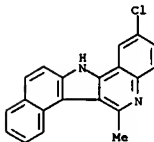


L7 ANSWER 231 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

RN 4240-70-4 CAPLUS
CN 13H-Benz[4,5]indolo[3,2-c]quinoline, 2-chloro-6-methyl-, monopicate (8CI) (CA INDEX NAME)

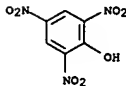
CM 1

CRN 4240-69-1
CMF C20 H13 Cl N2



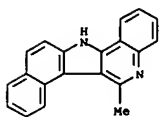
CM 2

CRN 88-89-1
CMF C6 H3 N3 O7

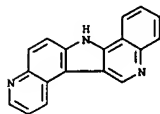


RN 4240-71-5 CAPLUS
CN 13H-Benz[4,5]indolo[3,2-c]quinoline, 6-methyl- (7CI, 8CI) (CA INDEX NAME)

L7 ANSWER 231 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

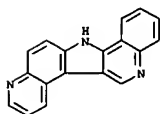


RN 4240-73-7 CAPLUS
CN 7H-Pyrrolo[3,2-c:4,5-f']diquinoline (7CI, 8CI) (CA INDEX NAME)



RN 4240-74-8 CAPLUS
CN 7H-Pyrrolo[3,2-c:4,5-f']diquinoline, picrate (8CI) (CA INDEX NAME)

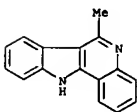
CM 1
CRN 4240-73-7
CMF C18 H11 N3



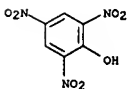
CM 2
CRN 88-89-1
CMF C6 H3 N3 O7

L7 ANSWER 231 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)
CN 11H-Indolo[3,2-c]quinoline, 6-methyl-, monopicate (8CI) (CA INDEX NAME)

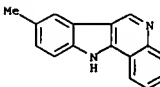
CM 1
CRN 4295-28-7
CMF C16 H12 N2



CM 2
CRN 88-89-1
CMF C6 H3 N3 O7



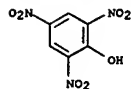
RN 4295-30-1 CAPLUS
CN 11H-Indolo[3,2-c]quinoline, 8-methyl-, monopicate (7CI, 8CI) (CA INDEX NAME)



RN 4295-32-3 CAPLUS
CN 11H-Indolo[3,2-c]quinoline, 9,10-dimethyl-, dipicrate (7CI, 8CI) (CA INDEX NAME)

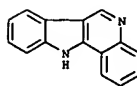
CM 1
CRN 4618-03-5
CMF C17 H14 N2

L7 ANSWER 231 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

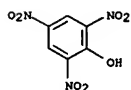


RN 4295-18-5 CAPLUS
CN 11H-Indolo[3,2-c]quinoline, monopicate (8CI) (CA INDEX NAME)

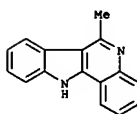
CM 1
CRN 239-09-8
CMF C15 H10 N2



CM 2
CRN 88-89-1
CMF C6 H3 N3 O7

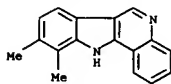


RN 4295-28-7 CAPLUS
CN 11H-Indolo[3,2-c]quinoline, 6-methyl-, monopicate (7CI, 8CI, 9CI) (CA INDEX NAME)

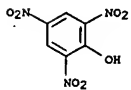


RN 4295-29-8 CAPLUS

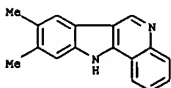
L7 ANSWER 231 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



CM 2
CRN 88-89-1
CMF C6 H3 N3 O7

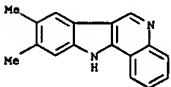


RN 4295-33-4 CAPLUS
CN 11H-Indolo[3,2-c]quinoline, 8,9-dimethyl-, monopicate (7CI, 8CI, 9CI) (CA INDEX NAME)



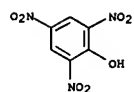
RN 4295-34-5 CAPLUS
CN 11H-Indolo[3,2-c]quinoline, 8,9-dimethyl-, monopicate (8CI) (CA INDEX NAME)

CM 1
CRN 4295-33-4
CMF C17 H14 N2

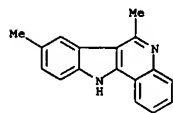


CM 2
CRN 88-89-1
CMF C6 H3 N3 O7

L7 ANSWER 231 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



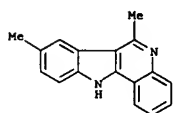
RN 4295-35-6 CAPLUS
 CN 11H-Indolo[3,2-c]quinoline, 6,8-dimethyl- (7CI, 8CI) (CA INDEX NAME)



RN 4295-40-3 CAPLUS
 CN 11H-Indolo[3,2-c]quinoline, 6,8-dimethyl-, monopicrate (8CI) (CA INDEX NAME)

CM 1

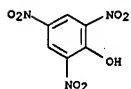
CRN 4295-35-6
 CMF C17 H14 N2



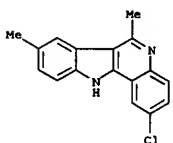
CM 2

CRN 88-89-1
 CMF C6 H3 N3 O7

L7 ANSWER 231 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



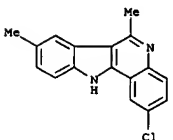
RN 4295-43-6 CAPLUS
 CN 11H-Indolo[3,2-c]quinoline, 2-chloro-6,8-dimethyl- (7CI, 8CI) (CA INDEX NAME)



RN 4295-44-7 CAPLUS
 CN 11H-Indolo[3,2-c]quinoline, 2-chloro-6,8-dimethyl-, monopicrate (8CI) (CA INDEX NAME)

CM 1

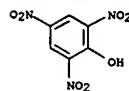
CRN 4295-43-6
 CMF C17 H13 Cl N2



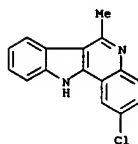
CM 2

CRN 88-89-1
 CMF C6 H3 N3 O7

L7 ANSWER 231 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



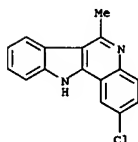
RN 4295-41-4 CAPLUS
 CN 11H-Indolo[3,2-c]quinoline, 2-chloro-6-methyl- (7CI, 8CI) (CA INDEX NAME)



RN 4295-42-5 CAPLUS
 CN 11H-Indolo[3,2-c]quinoline, 2-chloro-6-methyl-, monopicrate (8CI) (CA INDEX NAME)

CM 1

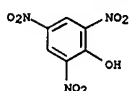
CRN 4295-41-4
 CMF C16 H11 Cl N2



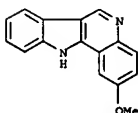
CM 2

CRN 88-89-1
 CMF C6 H3 N3 O7

L7 ANSWER 231 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



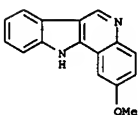
RN 4295-45-8 CAPLUS
 CN 11H-Indolo[3,2-c]quinoline, 2-methoxy- (7CI, 8CI, 9CI) (CA INDEX NAME)



RN 4295-46-9 CAPLUS
 CN 11H-Indolo[3,2-c]quinoline, 2-methoxy-, monopicrate (8CI) (CA INDEX NAME)

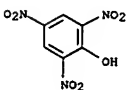
CM 1

CRN 4295-45-8
 CMF C16 H12 N2 O



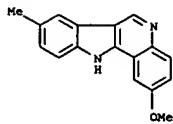
CM 2

CRN 88-89-1
 CMF C6 H3 N3 O7



RN 4295-47-0 CAPLUS
 CN 11H-Indolo[3,2-c]quinoline, 2-methoxy-8-methyl- (7CI, 8CI) (CA INDEX NAME)

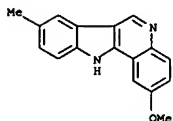
L7 ANSWER 231 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



RN 4295-48-1 CAPLUS
CN 11H-Indolo[3,2-c]quinoline, 2-methoxy-8-methyl-, monopicrate (8CI) (CA INDEX NAME)

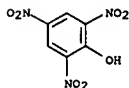
CM 1

CRN 4295-47-0
CMF C17 H14 N2 O



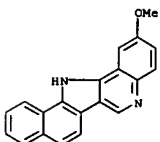
CM 2

CRN 88-89-1
CMF C6 H3 N3 O7



RN 4295-49-2 CAPLUS
CN 13H-Benz[6,7]indolo[3,2-c]quinoline (7CI, 8CI, 9CI) (CA INDEX NAME)

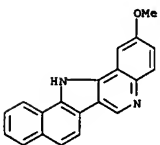
L7 ANSWER 231 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



RN 4550-98-5 CAPLUS
CN 13H-Benz[6,7]indolo[3,2-c]quinoline, 2-methoxy-, monopicrate (8CI) (CA INDEX NAME)

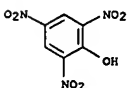
CM 1

CRN 4366-89-6
CMF C20 H14 N2 O



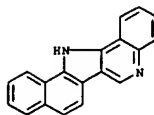
CM 2

CRN 88-89-1
CMF C6 H3 N3 O7



RN 4618-03-5 CAPLUS
CN 11H-Indolo[3,2-c]quinoline, 9,10-dimethyl- (7CI, 8CI) (CA INDEX NAME)

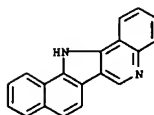
L7 ANSWER 231 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



RN 4295-50-5 CAPLUS
CN 13H-Benz[6,7]indolo[3,2-c]quinoline, 2-methoxy- (8CI) (CA INDEX NAME)

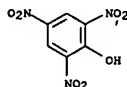
CM 1

CRN 4295-49-2
CMF C19 H12 N2



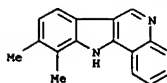
CM 2

CRN 88-89-1
CMF C6 H3 N3 O7



RN 4366-89-6 CAPLUS
CN 13H-Benz[6,7]indolo[3,2-c]quinoline, 2-methoxy- (7CI, 8CI) (CA INDEX NAME)

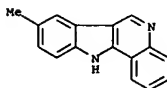
L7 ANSWER 231 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



RN 859042-33-4 CAPLUS
CN INDEX NAME NOT YET ASSIGNED

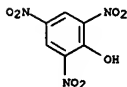
CM 1

CRN 4295-30-1
CMF C16 H12 N2

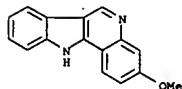


CM 2

CRN 88-89-1
CMF C6 H3 N3 O7

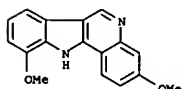


L7 ANSWER 232 OF 273 CAPLUS COPYRIGHT 2005 ACS ON STN
 RN 1965:45456 CAPLUS
 DN 63:54556
 OREF 63:99129
 TI Quasiteroidal heterocycles. IV. 5,6-Dihydrobenzo[a]carbazoles and indolo[3,2-c]quinolines
 AU Cross, P.E.; Jones, Emrys R. H.
 SO J. Chem. Soc., Suppl. (1964) 5919-21
 DT Journal
 LA English
 AB The synthesis is described of the N heterocyclic skeletons named in the title, with O functions at positions corresponding to 3 and 17 in the steroid nucleus.
 IT 97492-84-7, 11H-Indolo[3,2-c]quinoline, 3-methoxy-, hydrochloride
 97810-75-8, 11H-Indolo[3,2-c]quinoline, 3,10-dimethoxy-, hydrochloride 97810-76-9, 11H-Indolo[3,2-c]quinoline, 3,9-dimethoxy-, hydrochloride
 (preparation of)
 RN 97492-84-7 CAPLUS
 CN 11H-Indolo[3,2-c]quinoline, 3-methoxy-, hydrochloride (7CI) (CA INDEX NAME)



• x HCl

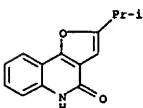
RN 97810-75-8 CAPLUS
 CN 11H-Indolo[3,2-c]quinoline, 3,10-dimethoxy-, hydrochloride (7CI) (CA INDEX NAME)



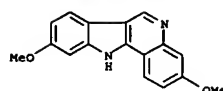
• x HCl

RN 97810-76-9 CAPLUS
 CN 11H-Indolo[3,2-c]quinoline, 3,9-dimethoxy-, hydrochloride (7CI) (CA INDEX NAME)

L7 ANSWER 233 OF 273 CAPLUS COPYRIGHT 2005 ACS ON STN
 RN 1964:461799 CAPLUS
 DN 61:61799
 OREF 61:10725c-e
 TI The furanoquinoline alkaloids. II. Synthetic approaches to demethoxylunacrine
 AU Huffman, John W.; Browder, Lawrence E.
 CS Clemson Univ., Clemson, SC
 SO Journal of Organic Chemistry (1964), 29(9), 2598-2602
 CODEN: JOCEAH; ISSN: 0022-3263
 DT Journal
 LA Unavailable
 OS CASREACT 61:61799
 GI For diagram(s), see printed CA Issue.
 AB cf. CA 55, 23532b. Two new synthetic approaches to the furoquinoline alkaloids have been explored. In the first, 3-isovaleryl-4-hydroxy-2-quinolone was converted to 2-isopropyl-3,4-dioxo-2,3,4,5-tetrahydrofuro[3,2-c]quinoline. This compound on reduction, dehydration, and hydrogenation gave 2-isopropyl-4-oxo-2,3,4,5-tetrahydrofuro[3,2-c]quinoline. In contrast to compds. lacking the 2-isopropyl group, the dihydrofuran ring was inert to POCl₃. In a 2nd approach, 3-isovaleryl-4-methoxy-2-quinoline was reduced to the alc., and upon reaction with either Me₂SO or POCl₃-CSH₅N gave 2-isopropyl-4-methoxy-2,3-dihydrofuro[2,3-b]quinoline. This compound with MeI gave the N-Me derivative, which was converted to demethoxylunacrine (I) upon treatment with LiBr-MeCN.
 IT 97339-09-8, Furo[3,2-c]quinolin-4(5H)-one, 2-isopropyl- (preparation of)
 RN 97339-09-8 CAPLUS
 CN Furo[3,2-c]quinolin-4(5H)-one, 2-(1-methylethyl)- (9CI) (CA INDEX NAME)



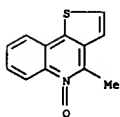
L7 ANSWER 232 OF 273 CAPLUS COPYRIGHT 2005 ACS ON STN (Continued)



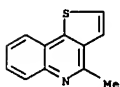
• x HCl

L7 ANSWER 234 OF 273 CAPLUS COPYRIGHT 2005 ACS ON STN
 RN 1963:428498 CAPLUS
 DN 59:28498
 OREF 59:5144d-h
 TI Reaction of 2,3-dihydrothieno[2,3-b]quinoline and 4-methyl-2,3-dihydrothieno[3,2-c]quinoline with phthalic monoperacid
 AU Kobayashi, Goro; Kuwayama, Yoshikata; Okamura, Shimako
 CS Univ. Nagasaki, Japan
 SO Yakugaku Zasshi (1963), 83, 234 9
 CODEN: YKZAJ; ISSN: 0031-6903
 DT Journal
 LA Unavailable
 AB 4-Methyl-2,3-dihydrothieno[3,2-c]quinoline (I) (1 g.) in 10 ml. Et₂O treated with 2 equivs. monoperphthalic acid (II) in Et₂O, kept 2 days, the product filtered, suspended in 10% NaOH, taken up in CHCl₃, and the CHCl₃ residue in C₆H₆ chromatographed through Al₂O₃ gave 0.2 g. I S,S-dioxide (III), m. 182-4, 0.1 g. I S,S,N-trioxide (IV), m. 217-18, 0.1 g. I S,N-dioxide (V), m. 186-8, 0.1 g. I S-oxide (VI), m. 163-5. The above reaction with 1 equivalent II gave 0.2 g. VI and a small amount of III and V. I (0.5 g.) and 5 ml. Ac₂O refluxed 3 hrs., the Ac₂O removed in vacuo, the residue made alkaline with 10% NaOH, and the product extracted with C₆H₆ gave 0.3 g. 4-methylthieno[3,2-c]quinoline (VII), needles, m. 126-7; picrate m. 215-17. 2-Methyl-3-(2-chloroethyl)-4-chloroquinoline (VIII) (1 g.) in 20 ml. Et₂O and 2 equivs. II in Et₂O kept 3 days with cooling, the product filtered off, suspended in 10% NaOH, and the product extracted with CHCl₃ gave VIII N-oxide, needles, m. 108-9. EtONa (50 ml. EtOH and 0.55 g. Na) saturated with H₂S, 1 g. VIII N-oxide in 20 ml. EtOH added, saturated with H₂S, heated 3 hrs. at 40-50°, refluxed 2 hrs., the solution concentrated in vacuo, and the product extracted with C₆H₆ gave 0.3 g. I N-oxide (IX), m. 97-8; picrate m. 192-4. IX (0.5 g.) in 5 ml. Ac₂O heated 3 hrs. on a H₂O bath, the Ac₂O removed in vacuo, and the residue recrystd. (EtOH) gave 0.4 g. 4-acOCH₂ analog (X) of I, m. 94-5. X (0.5 g.) in 30 ml. 10% HCl refluxed 10 min., made alkaline with 10% NaOH, and the product extracted with C₆H₆ gave 0.3 g. 4-HOCH₂ analog of I, columns, m. 158-9 (MeOH). 2,3-Dihydrothieno[2,3-b]quinoline (XI) (1 g.) in Et₂O and 1 equivalent II in Et₂O kept overnight with cooling and the product treated as usual gave 0.5 g. XI S-oxide, needles, m. 144-6. The above reaction with 2.2 equivs. II gave 0.4 g. XI S,S-dioxide, m. 211-12. XI S-oxide (1 g.) and 10 ml. Ac₂O heated 3 hrs. at 150-60°, the Ac₂O removed in vacuo, and the product treated as usual gave 0.8 g. thieno[2,3-b]quinoline (XII), m. 105-6; picrate m. 212-13. VII (0.5 g.) in Et₂O and 3-5 equivs. II in Et₂O kept 3 days with cooling and the product treated as usual gave 0.25 g. VII N-oxide, m. 170-2. XII (0.5 g.) treated as above gave 0.3 g. XII N-oxide, m. 153-4.
 IT 95251-56-2, Thieno[3,2-c]quinoline, 4-methyl-, 5-oxide
 95389-31-4, Thieno[3,2-c]quinoline, 4-methyl-, 98178-89-3, Thieno[3,2-c]quinoline, 4-methyl-, picrate
 (preparation of)
 RN 95251-56-2 CAPLUS
 CN Thieno[3,2-c]quinoline, 4-methyl-, 5-oxide (7CI) (CA INDEX NAME)

L7 ANSWER 234 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



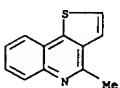
RN 95389-31-4 CAPLUS
CN Thieno[3,2-c]quinoline, 4-methyl- (7CI) (CA INDEX NAME)



RN 98178-89-3 CAPLUS
CN Thieno[3,2-c]quinoline, 4-methyl-, picrate (7CI) (CA INDEX NAME)

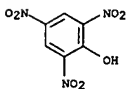
CM 1

CRN 95389-31-4
CMF C12 H9 N S

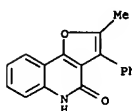


CM 2

CRN 88-89-1
CMF C6 H3 N3 O7



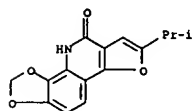
L7 ANSWER 235 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN
AN 1963:415609 CAPLUS
DN 59:15609
OREF 59:2815f-h
TI Furans and pyrans. IV. Preparation of condensed furan derivatives
AU Reisch, J.
CS Univ. Muenster, Germany
SO Angew. Chem. (1962), 74(20), 783
DT Journal
LA Unavailable
GI For diagram(s), see printed CA issue.
AB cf. CA 58, 11337d. Furan derivs. were prepared from Ph(HC.tplbond.C)CHOH and
cyclic β -dicarbonyl compds. in the presence of concentrated H₂SO₄ or BF₃-Et₂O in glacial AcOH, 30 min. at 100°. Thus prepared were: 75% I, m. 268° (decomposition), from barbituric acid; 85% II, m. 147-8°, from 1,3-indandione; 67% III, m. 199°, from 4-hydroxycoumarin; 60% IV, m. 264°, from 4-hydroxycarbostyryl.
IT 88893-96-3, Furo[3,2-c]quinolin-4(5H)-one, 2-methyl-3-phenyl- (preparation of)
RN 88893-96-3 CAPLUS
CN Furo[3,2-c]quinolin-4(5H)-one, 2-methyl-3-phenyl- (7CI) (CA INDEX NAME)



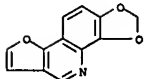
L7 ANSWER 234 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

L7 ANSWER 236 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN
AN 1963:409166 CAPLUS
DN 59:9166
OREF 59:1694h,1695a-e
TI Alkaloids of the root-bark of *Orixa japonica*. XI. Structures of orixidine and orixidine
AU Narahashi, Kazuko
CS Coll. Pharm., Tokyo
SO Chemical & Pharmaceutical Bulletin (1962), 10, 792-803
CODEN: CPBTAL; ISSN: 0009-2363
DT Journal
LA Unavailable
GI For diagram(s), see printed CA issue.
AB cf. CA 58, 13326f. Orixine (I) (932 mg.) and 25 cc. 10% HCl refluxed 3 hrs. gave 200 mg. compound (II); the filtrate from II made alkaline gave
via Et₂O extraction 589 mg. compound (III); II in CHCl₃ chromatographed on 15 g. alumina and eluted with 98:2 CHCl₃-MeOH gave 175 mg. orixidine (IV), m. 191°. III in CHCl₃ chromatographed on 40 g. alumina and eluted with 95:5 CHCl₃-MeOH gave 0.395 g. orixidine (V), m. 209-10°. I (867 mg.) and 20 cc. 20% HCl as above gave 370 mg. IV and 157 mg. V. Norixine (VI) (204 mg.) and 5 cc. 10% HCl refluxed 3 hrs., cooled, diluted with H₂O gave via CHCl₃ extraction, chromatography on 30 g. alumina, and elution by (a) 98:2 CHCl₃-MeOH, 2.2 mg. IV, m. 188-9°, and (b) 97:3 CHCl₃-MeOH, 77.4 mg. orixidine (VII), m. 208-9°; 55 mg. VI and 2 cc. 20% HCl gave 16.8 mg. IV and 10.6 mg. VII. Isoorixine (VIII) (30 mg.) and 0.8 cc. 10% HCl gave as above 2 mg. N-methylorixidine (IX) and 11 mg. N-methylorixidine (X); 30 mg. VIII and 0.8 cc. 20% HCl gave 8.6 mg. IX and 2.4 mg. X. To 100 mg. IV in 15 cc. anhydrous EtOH was added Et₂O-CH₂N₂ to give via chromatography in CHCl₃ on 15 g. alumina 69 mg. IX, m. 154-5°; V similarly gave X, m. 212-13°. IV (60 mg.), 6 cc. EtOH, Pd-C (from 3 cc. 1% PdCl₂ on activated C) and H at 40-5° gave, via chromatography on 10 g. alumina, 15 mg. dihydroorixidine, m. 225-7°; IX similarly gave the dihydro derivative (XI), m. 135-6°. To 131 mg. IV in 30 cc. EtOAc was added at -60°, O₃ to a brown color; workup gave no HCHO, Me₂CO, or Me₂CH(OH)CO₂H, but Me₂CHCO₂H was detected. X (100 mg.), 1.5 cc. Ac₂O, and 200 mg. AcONa refluxed 1.5 hrs. gave via chromatography in CHCl₃ solution and elution with 10:0.1 hexane-MeOH, 109 mg. acetate (XII), m. 169-71°. Iso-N-methylorixidine (XIII) (36.8 mg.), 6 cc. C₅H₅N, and 2 cc. Ac₂O kept overnight at room temperature gave via chromatography and elution with CHCl₃ on 6 g. alumina 30.6 mg. acetate (XIV), m. 151-2°; XIV and MeOH-KOH under reflux gave both X and XIII, m. 233-4°; X under similar conditions was partially converted to XIII. XIV (45 mg.), 5 cc. MeOH, and 2 cc. concentrated HCl heated 3.5 hrs. at 100° gave 25.2 mg. XIII. VIII, XI, and XIII were unaffected by heating with MeOH-KOH or MeOH-HCl. X (100 mg.) and 2.0 cc. concentrated H₂SO₄ were mixed with cooling, the whole kept 0.5 min. and poured into H₂O gave via CHCl₃ extraction, chromatography and elution with 99:1 CHCl₃-MeOH, IX; VII similarly gave IV. Kokusagine (XV) (208.8 mg.) and 5 cc. MeI heated 4 hrs. at 120° gave via chromatography on 15 g. alumina 187.5 mg. isokokusagine (XIV), m. 247-8°, XVI (90 mg.), 40 cc. anhydrous EtOH, Pd-C (from 9 cc. 1% PdCl₂ and 90 mg. activated C) and H gave via chromatography and elution with CHCl₃, 34.2 mg. 5-methyl-6,7-

L7 ANSWER 236 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)
 methylenedioxy-2,3-dihydrofuro[3,2-c]quinolin-4-one (XVII), m.
 202-3°, and 10.4 mg. 9-methyl-7,8-methylenedioxy-2,3-dihydrofuro
 [2,3-b] quinolin-4-one (XVIII), m. 208-9°. In a H atm. XVIII
 gradually gave XVII with no H absorption; XVI, Pd-C and H in 50 cc. hot
 C6H6 gave only XVIII. XIX (40 mg.) and 2 cc. 10% HCl refluxed 1.5 hrs.
 gave via chromatography, XVII and XVIII; XX similarly gave
 6,7-methylenedioxy-2,3-dihydrofuro[3,2-c]quinolin-4(5H)-one, m.
 272°. As with XV above, skimmamine and MeI gave isoskimmamine
 (XXI), m. 188-9°. XXI (100 mg.), 25 cc. MeOH, Pd-C (from 10 cc. 1%
 PdCl₂ and 100 mg. activated C) and H gave 62 mg. 7,8-dimethoxy-9-methyl-
 2,3-dihydrofuro[2,3-b]quinolin-4-one, m. 176-8°. Ultraviolet data
 were given.
 IT 6887-33-8, 1,3-Dioxolo[4,5-h]furo[3,2-c]quinolin-5(4H)-one,
 7-isopropyl-, orixidine
 (preparation of)
 RN 6887-33-8 CAPLUS
 CN 1,3-Dioxolo[4,5-h]furo[3,2-c]quinolin-5(4H)-one, 7-(1-methylethyl)- (9CI)
 (CA INDEX NAME)



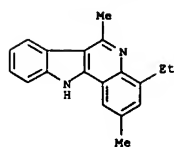
L7 ANSWER 237 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



L7 ANSWER 237 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 1963:78013 CAPLUS
 DN 58:78013
 OREF 58:13326e-h,13327a
 TI Alkaloids of root-bark of *Orixa japonica*. XII. Nuclear magnetic resonance
 (N.M.R.) study of N-methylorixidine, N-methylisoorixidine, and
 N-methylorixidine
 AU Terasaka, Masanobu; Yamamoto, Kazuko; Kawazoe, Yutaka
 CS Tokyo Coll. Pharm.
 SO Chemical & Pharmaceutical Bulletin (1963), 11, 108-114
 CODEN: CPBTAL; ISSN: 0009-2363
 DT Journal
 LA English
 GI For diagram(s), see printed CA Issue.
 AB cf. ibid. 10, 792(1962); CA 58, 555f. N.M.R. measurements of
 N-methylorixidine (I) and its acetate (II), and N-methylisoorixidine
 (III) and its acetate (IV) in CHCl₃, and of N-methylorixidine (V) in CS₂
 verify their structures. Each spectrum has 2 sharp peaks corresponding
 to 3 C-Me protons. A paramagnetic shift in conversion of I to II in these
 bands confirms a Me-C-OR system. This shift is not evident in the case
 of III and IV, suggesting that the acetylable O is far enough removed from
 the Me groups to prevent shifts. The signal at 3.40-3.50 p.p.m. in each
 spectrum was assigned to the resonance of the Me group attached to
 quinoline N. II and III have a signal at 5.18 and 5.26 p.p.m., resp., of
 3 protons assigned to Me resonance of acetoxyl groups. The peaks at
 1.23-8 p.p.m. of 2 protons in each spectrum was assigned to resonance of
 methylenedioxy groups. The doublet at 4.11 and triplet at 2.05 p.p.m. of
 II, relative intensity 2:1, suggests that the conformation of the
 substituents of the dihydrofuran ring is quasiequatorial. The signal at
 3.4 p.p.m. in the spectrum of III was assigned to a single proton on C2
 carrying an OH group. The spectrum downward shift of 0.39 p.p.m. for the
 C2 proton of I relative to II verifies a CH-C-OH structure. The
 quinoline
 system was shown to be carbostyryl by the relative shift between 2
 protons
 on C5 and C6. The spin coupling consts. of 8.2 cycles/sec. are in good
 agreement for ortho-protons on an aromatic ring. The signals at 4.58 and
 5.44 p.p.m. in the spectra of I and III, resp., were assigned to the
 resonances of the alc. protons. The spectrum of V shows a 0.56 p.p.m.
 doublet (2 C-Me groups), a 2.23 p.p.m. singlet (N-Me), a 4.53 p.p.m.
 singlet (methylenedioxy), a 4.93 p.p.m. singlet (1 vinyl proton), 2
 doublets at 5.14 and 5.75 p.p.m. (C5 and C6 protons, resp.), and a
 multiplet at 1.60 p.p.m. (CH proton next to Me).
 IT 217-20-9, 1,3-Dioxolo[4,5-h]furo[3,2-c]quinoline
 (alkaloid derivs.)
 RN 217-20-9 CAPLUS
 CN 1,3-Dioxolo[4,5-h]furo[3,2-c]quinoline (8CI, 9CI) (CA INDEX NAME)

L7 ANSWER 238 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 1961:106001 CAPLUS
 DN 55:106001
 OREF 55:19977g-1,19978a-d
 TI Structure of catharanthine, a novel variant of the iboga alkaloids
 AU Neuss, Norbert; Gorman, Marvin
 CS Lilly Research Labs., Indianapolis, IN
 SO Tetrahedron Letters (1961) 206-10
 CODEN: TELEAY; ISSN: 0040-4039
 DT Journal
 LA Unavailable
 AB cf. CA 54, 6772d. Catharanthine (I), C₂₁H₂₄N₂O₂, containing a MeO₂C
 group and
 an isolated double bond, was hydrogenated in alc. at 20°/1 atmospheric
 with prerduced PtO₂ to give dihydrocatharanthine (II, R = R₂ = H, R₁ =
 MeO₂C, R₃ = Et) (III), m. 63-5°, [α]_D²⁰ 33° (CHCl₃);
 HCl salt m. 216-21° (decomposition), [α]_D²⁰ 44° (MeOH).
 Decarboxylation of III with N₂H₄ in absolute alc. under reflux in a
 manner
 analogous to that reported for voacangine (II, R = OMe, R₁ = MeO₂C, R₂ =
 Et, R₃ = H) (IV) gave a new decarbomethoxy base, epibogamine (II, R = R₁
 = R₂ = H, R₃ = Et) (V), C₁₉H₂₄N₂, m. 162-4° (Et₂O or EtOAc); HCl
 salt m. 183-8°, [α]_D²⁵ 86° (MeOH). I reduced with
 LiAlH₄ to catharanthanol and treated with dry HCl in Me₂CO gave the
 tetrahydro-1,3-oxazine derivative, C₂₃H₂₈N₂O₂, m. 188-91°, with no
 NH-indole or OH absorption in the infrared spectrum, and further showing
 the position of the C-18 MeO₂C group. The relation of I and its deriva.
 to the corresponding iboga alkaloids, ibogamine (II, R = R₁ = R₃ = H, R₂
 = Et) (VI) and coronaridine (II, R = R₃ = H, R₁ = MeO₂C, R₂ = Et) (VII) was
 indicated by infrared spectral similarities and demonstrated by isolation
 of 4-ethyl-2,6-dimethyl-11H-indolo[3,2-e]quinoline, identical with a
 specimen obtained by dehydrogenation of VI. The presence of an Et group
 and a single proton on a double bond (Me triplet centered at 8.90 with
 peaks separated by 7 cycles/sec. and a peak at 4.10) in the nuclear
 magnetic
 resonance spectrum indicated the position of the double bond in I and the
 position was corroborated by products resulting from dehydrogenation of I
 and III with Pd-C. I gave a good yield of 3-EtC₅H₄N at 150-60° and
 pyrolysis at 230-50° yielded 3,5-MeEtC₅H₃N in a manner similar to
 that described for IV. Hydrogenation I to gave only 1 isomer, which
 indicated that the H approached from the side nearest to N to produce the
 axial Et group. Consequently, it was assumed that III and V were
 epimeric
 at C-4 with VII and VI, resp., since the C-Et group in the iboga
 alkaloids
 was shown to be equatorial. Accordingly I was designated
 Δ³-dehydrocoronaridine.
 IT 110532-92-8, 11H-Indolo[3,2-c]quinoline, 4-ethyl-2,6-dimethyl-
 (preparation of)
 RN 110532-92-8 CAPLUS
 CN 11H-Indolo[3,2-c]quinoline, 4-ethyl-2,6-dimethyl- (6CI) (CA INDEX NAME)

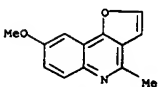
L7 ANSWER 238 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



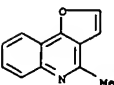
L7 ANSWER 239 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 1961:105853 CAPLUS
 DN 55:105853
 GREF 55:19922e-1.19923a-d
 TI Syntheses of quinoline compounds. XI. Bromination of 4-chloroquinolines.
 1
 AU Nagaoka, Satoshi
 CS Shizuoka Coll. Pharm.
 SO Yakugaku Zasshi (1961), 81, 479-83
 CODEN: YKKZAJ; ISSN: 0031-6903
 DT Journal
 LA Unavailable
 AB cf. CA 55, 154881. 4-Chloro-3-vinylquinoline (I) (2 g.) in 20 ml. CCl₄ treated dropwise with 1.6 g. Br in 20 ml. CCl₄ at room temperature, the mixture refluxed, kept overnight, the CCl₄ layer concentrated, and the residue treated with 3 ml. EtOH gave 3 g. 4-chloro-3-(1,2-dibromoethyl)quinoline (II), prisms, m. 87-8°; II.HCl, prisms, m. 183-4° (decomposition). Similarly, 2.3 g. 4-chloro-6-methoxy-3-vinylquinoline (III) and 1.6 g. Br in CCl₄ gave 3 g. 4-chloro-3-(1,2-dibromoethyl)-6-methoxyquinoline (IV), prisms, m. 142-3° (AcOEt). Catalytic reduction of 4-chloro-2-(dibromomethyl)-3-vinylquinoline or 4-chloro-3-(1,2-dibromoethyl)-2-(bromomethyl)quinoline in EtOH or EtOH-AcOEt with Pd-C gave 3-ethylquinoline (V), prisms, m. 74-4.5°. Similarly, IV, 3-(1-bromovinyl)-4-chloro-6-methoxyquinoline (VI) or 4-chloro-3-(1,2-dibromomethyl)-2-(dibromomethyl)quinoline (VII) gave 3-ethyl-6-methoxyquinoline (VIII), prisms, m. 221-2° (EtOH-AcOEt). 4-Chloro-3-(2-chloroethyl)-quinoline (3 g.) and 2 g. Br in AcOH treated as in II, the AcOH removed, the residue in hot H₂O made alkaline with Na₂CO₃, and the insol. portion recrystd. (50% EtOH) gave 1.5 g. 4-chloro-3-(2-chloroethyl)-2-(dibromomethyl)quinoline, needles, m. 140.5-1.5°. Similarly, 2.7 g. 4-chloro-3-(2-chloroethyl)-6-methoxyquinoline and 1.6 g. Br in AcOH gave 1.5 g. 4-chloro-3-(2-chloroethyl)-6-methoxy-2-(dibromomethyl)quinoline-H₂O, prisms, m. 118-20° (EtOH). II (2 g.) in 30 ml. 5% NaOH-EtOH refluxed 2 hrs. and the product treated with HCl gave 0.8 g. 4-ethoxy-3-ethynylquinoline-HCl. 0.5H₂O, needles, m. 133-4° (decomposition) (EtOH-AcOEt). Similarly, 2 g. IV gave 0.7 g. 4-ethoxy-3-ethynyl-6-methoxyquinoline, oil; picrate, needles, m. 202°. IV (3 g.) in 150 ml. 70% EtOH and 3 g. K₂CO₃ refluxed 2 hrs. and the solution concentrated gave 1.7 g. VI, needles, m. 123°. II (2 g.) and 0.9 g. Br in CCl₄ treated as usual gave 1.8 g. VII, prisms, m. 173-4° (AcOEt). IV (2 g.) and 0.8 g. Br in AcOH treated as above gave 1.5 g. 4-chloro-3-(1,2-dibromoethyl)-2-dibromomethyl-6-methoxyquinoline, prisms, m. 149-51° (AcOH). II (1 g.), 0.4 g. PhNH₂.HCl, 30 ml. EtOH, and 0.5 ml. 10% HCl refluxed 2 hrs., the EtOH removed, and the residue in 5% HCl made alkaline with Na₂CO₃ gave 4-methyl-1-phenyl-1H-pyrrolo[3,2-c]quinoline, oil; picrate, prisms, m. 191-2° (decomposition). Similarly, 1 g. IV, 0.4 g. PhNH₂.HCl, 50 ml. EtOH, and 0.5 ml. 10% HCl gave 8-methoxy-4-methyl-1-phenyl-1H-pyrrolo[3,2-c]quinoline, m. above 300°. II (2 g.), 2 g. AcONa, and 20 ml. AcOH in a sealed tube heated 5 hrs. at 150-60°, the solution concentrated in

L7 ANSWER 239 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)
 vacuo, the residue in 10% HCl heated 1 hr. at 100°, and made alk. with Na₂CO₃ gave 0.8 g. 4-methylfuro[3,2-c]quinoline, prisms, m. 97°. Similarly, 2 g. IV yielded 1.8 g. 8-methoxy-4-methylfuro[3,2-c]quinoline, m. 62-72°; picrate m. 218°. IV (1 g.) in 20 ml. AcOH heated 2 hrs. at 100°, the AcOH removed, the residue taken up in 5% HCl, made alk. with Na₂CO₃, and the product extd. with hot H₂O gave 0.2 g. 4-methyl-2,3-dihydro-3-furo[3,2-c]quinolinol, prisms, m. 200° (C₆H₆). II (2 g.) in 100 ml. 50% H₂SO₄ heated 24 hrs. at 120-30°, cooled, 300 ml. H₂O added, and the soln. made alk. with Na₂CO₃ gave 1 g. 1-bromo-9-chloro-2,3-dihydro-1H-cyclopenta[b]quinoline (IX), prisms, m. 174-5° (C₆H₆). Similarly, 2 g. IV yielded 0.9 g. 1-bromo-9-chloro-7-methoxy-2,3-dihydro-1H-cyclopenta[b]quinoline (X), granules, m. 195-6° (50% EtOH). On catalytic redn., IX in EtOH with Pd-C absorbed 2 moles H and gave 2,3-dihydro-1H-cyclopenta[b]quinoline, prisms, m. 60° (ligroin). Similarly, X gave 7-methoxy-2,3-dihydro-1H-cyclopenta[b]quinoline-2H₂O, needles, m. 76° (40% EtOH). 4-Methyl-2,3-dihydrofuro[3,2-c]quinoline (1.8 g.) in 2.5 g. AcONa and 100 ml. AcOH at 60-70° treated dropwise with 4.8 g. Br in 50 ml. AcOH, the mixt. kept overnight, and the ppt. of 5% HCl-insol. portion recrystd. (EtOH) gave 0.5 g. 4-(tribromomethyl)-2,3-dihydrofuro[3,2-c]quinoline, m. 167-8°.

IT 34547-92-7, Furo[3,2-c]quinoline, 8-methoxy-4-methyl- 34594-11-1, Furo[3,2-c]quinoline, 4-methyl- 110059-89-7, 1H-Pyrrolo[3,2-c]quinoline, 4-methyl-1-phenyl- 111274-01-2, Furo[3,2-c]quinoline, 8-methoxy-4-methyl-, picrate 111666-53-6, 1H-Pyrrolo[3,2-c]quinoline, 8-methoxy-4-methyl-1-phenyl- 115101-32-1, 1H-Pyrrolo[3,2-c]quinoline, 4-methyl-1-phenyl-, picrate (preparation of)
 RN 34547-92-7 CAPLUS
 CN Furo[3,2-c]quinoline, 8-methoxy-4-methyl- (6CI, 9CI) (CA INDEX NAME)

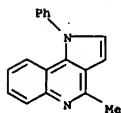


RN 34594-11-1 CAPLUS
 CN Furo[3,2-c]quinoline, 4-methyl- (6CI, 9CI) (CA INDEX NAME)

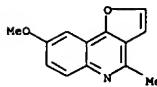


RN 110059-89-7 CAPLUS
 CN 1H-Pyrrolo[3,2-c]quinoline, 4-methyl-1-phenyl- (6CI, 9CI) (CA INDEX NAME)

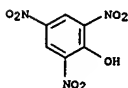
L7 ANSWER 239 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



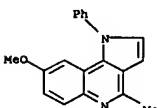
RN 111274-01-2 CAPLUS
 CN Furo[3,2-c]quinoline, 8-methoxy-4-methyl-, picrate (6CI) (CA INDEX NAME)
 CM 1
 CRN 34547-92-7
 CMF Cl3 H11 N O2



CM 2
 CRN 88-89-1
 CMF C6 H3 N3 O7



RN 111666-53-6 CAPLUS
 CN 1H-Pyrrolo[3,2-c]quinoline, 8-methoxy-4-methyl-1-phenyl- (6CI) (CA INDEX NAME)

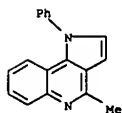


RN 115101-32-1 CAPLUS
 CN 1H-Pyrrolo[3,2-c]quinoline, 4-methyl-1-phenyl-, picrate (6CI) (CA INDEX NAME)

L7 ANSWER 239 OF 273 CAPLUS COPYRIGHT 2005 ACS ON STN (Continued)

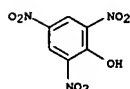
CM 1

CRN 110059-89-7
CMF C18 H14 N2



CM 2

CRN 88-89-1
CMF C6 H3 N3 O7



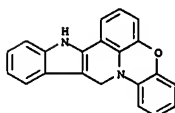
L7 ANSWER 240 OF 273 CAPLUS COPYRIGHT 2005 ACS ON STN (Continued)

Indolo[2',3':4,5]pyrido[3,2,1-kl]phenoselenazine, 10,15-dihydro-

(prepn. of)

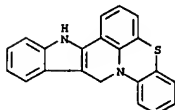
RN 111416-44-5 CAPLUS

CN Indolo[2',3':4,5]pyrido[3,2,1-kl]phenoxazine, 10,15-dihydro- (6CI) (CA INDEX NAME)



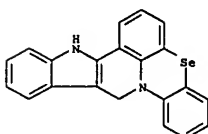
RN 111416-47-8 CAPLUS

CN Indolo[2',3':4,5]pyrido[3,2,1-kl]phenothiazine, 10,15-dihydro- (6CI) (CA INDEX NAME)



RN 111416-48-9 CAPLUS

CN Indolo[2',3':4,5]pyrido[3,2,1-kl]phenoselenazine, 10,15-dihydro- (6CI) (CA INDEX NAME)



L7 ANSWER 240 OF 273 CAPLUS COPYRIGHT 2005 ACS ON STN

AN 1961:59529 CAPLUS

DN 55:59529

OREF 55:11431d-h

TI β -Cyanoethylation of phenoxazine and 7H-benzo[c]phenothiazine

AU Muller, Paulette; Buu-Hoi, Ng. Ph.; Rips, R.

CS Univ. Paris

SO Journal of Organic Chemistry (1959), 24, 1699-701

CODEN: JOCEAH; ISSN: 0022-3263

DT Journal

LA Unavailable

OS CASREACT 55:59529

AB Phenoxazine (I) and 7H-benzo[c]phenothiazine (II) condensed smoothly with CH_2CHCN (III) in the presence of organic alkaline catalysts to give β -(10-phenoxazinyl)propionitrile (IV). To 11 g. I and 15 ml. III was added dropwise with stirring 0.5 m. $\text{PhCH}_2\text{NMe}_3\text{OMe}$ (V) (exothermic reaction), the mixture heated 30 min. on a H_2O bath, concentrated in vacuo, the residue taken up in C_6H_6 , and the filtered solution evaporated in vacuo to give

33.5 g. IV, m. 123° (Et₂O or EtOH). IV (6.8 g.) and 7.5 g. NaOH in 100 ml. EtOH gently refluxed 10 hrs., cooled, diluted with H_2O , and the filtered solution acidified with dilute HCl gave 5 g. corresponding acid (VI),

m. 138° (cyclohexane). VI (3.5 g.) in 75 ml. anhydrous C_6H_6 refluxed 1 hr. with 19 g. P_2O_5 , the mixture kept overnight at room temperature, poured over

ice, the C_6H_6 layer washed with aqueous Na_2CO_3 and H_2O , dried, evaporated in

vacuo, and the residual solid (2.7 g.) treated with C_6H_6 -cyclohexane gave 0.5 g. 3-oxo-1H-pyrido[3,2,1-kl]phenoxazine (VII), m. 228° (EtOH), which did not form a phenylhydrazone; concentration of the mother

liquors gave 2

g. 2,3-dihydro derivative (VIII) of VII, m. 144° (EtOH);

phenylhydrazone (IX) m. 187° (EtOH). Fischer cyclization of 0.25

g. IX by boiling its solution in AcOH saturated with HCl a few min. gave 0.18 g.

Indolo[3',2':2,3]1H-pyrido[3,2,1-kl]phenoxazine-1.5H₂O, m. above 300° . Similar Fischer condensations of 2 g. phenylhydrazones of the

S analog (X) of VIII and of 0.3 g. phenylhydrazones of the Se analog of VIII gave 1.5 g. indolo[3',2':2,3]1H-pyrido[3,2,1-kl]phenothiazine,

containing EtOH of crystallization, m. 275° (decomposition), and 0.2 g. indolo[3',2':2,3]1H-pyrido[3,2,1-kl]phenoselenazine, m. 258°

(EtOH), resp. X (2.5 g.) and 1.7 g. KOH in 10 ml. EtOH refluxed 40 hrs. gave 2.7 g. 4'-carboxyquinoleino[3',2':2,3]1H-pyrido[3,2,1-

kl]phenothiazine (XI), m. 325° , thermally decarboxylated to the corresponding base, m. 202° (EtOH). Similarly was prepared the

phenoselenazine analog of XI, m. above 300° (decomposition) (EtOH). II (Knoevenagel, CA 8, 2156) (b.p. $123-40^\circ$, m. 178°) (15.5 g.)

in 25 ml. III treated dropwise with 1 ml. V gave 12 g.

β -(7H-benzo[c]phenothiazinyl)propionitrile (XII), m. 224° (Me₂CO). XII (5.5 g.) in 100 ml. 5% NaOH in EtOH refluxed 10 hrs. gave

3.3 g. corresponding acid, m. 190° (EtOH). The infrared spectra of VII, VIII, X, and the 10-Cl derivative of X were recorded.

111416-44-5, Indolo[2',3':4,5]pyrido[3,2,1-kl]phenoxazine,

10,15-dihydro- 111416-47-8, Indolo[2',3':4,5]pyrido[3,2,1-kl]phenothiazine, 10,15-dihydro- 111416-48-9,

L7 ANSWER 241 OF 273 CAPLUS COPYRIGHT 2005 ACS ON STN

AN 1960:91716 CAPLUS

DN 54:91716

OREF 54:17396g-1,17397a-c

TI Furoquinolines. XVII. On pseudodictamnine of Asahina and Inubuse

AU Ohta, Tatsuo; Mori, Yo; Umeda, Masuo

CS Tokyo Coll. Pharm

SO Chemical & Pharmaceutical Bulletin (1959), 7, 547-49

CODEN: CPBTAL; ISSN: 0009-2363

DT Journal

LA Unavailable

GI For diagram(s), see printed CA Issue.

AB cf. CA 53, 1636a. Nordictammal (I) (5 g.) and 3 g. $\text{NCH}_2\text{CO}_2\text{H}$ in 250 cc.

10% KOH was kept at $30-5^\circ$ till I dissolved. When the temperature was

raised above 40° NH_3 evolved. The mixture was acidified with HCl to

yield 6.1 g. product; the NaHCO_3 -soluble portion was acidified and the crude

product gave anal. data corresponding to II, which was converted by

recrystn. from AcOH (intense yellow fluorescence) to

2,5-dioxo-5,6-dihydro-

2H-pyrano[3,2-c]quinoline-3-carboxylic acid (III), m. $305-6^\circ$

(decomposition). The NaHCO_3 -insol. portion proved to be III. The crude

mixture from the above reaction gave III on heating with concentrated H_2SO_4 on a

water bath. III was also obtained when 2 g. I, 1.7 g. $\text{CH}_2(\text{CO}_2\text{Et})_2$ in 35 cc.

CSH_5N , and 3 drops piperidine was refluxed 12/3 hrs., CSH_5N distilled,

H_2O added, the whole filtered and acidified with HCl. Sublimation of III

gave 5,6-dihydro-2H-pyrano[3,2-c]quinoline-2,5-dione (IV), m. $327-8^\circ$

(AcOH). IV was also synthesized from 4-hydroxycarbostyryl, malic acid,

and concentrated H_2SO_4 (cf. CA 50, 12085h).

3-Bromo-5,6-dihydro-2H-pyrano[3,2-c]quinoline-2,5-dione (V), m. $306-8^\circ$, was obtained by keeping a

mixture of 2 g. IV, 24 cc. 10% Et-glacial AcOH, and glacial AcOH a week;

yield 1.4 g. Perkin rearrangement of V gave needles, m. $312-15^\circ$

(decomposition) (EtOH) (blue fluorescence in NaHCO_3 solution). VI (R =

H, X =

CO_2H) (0.1 g.) was methylated with 0.2 cc. Me_2SO_4 and 0.3 cc. 50% KOH

solution, the mixture diluted with 5 cc. H_2O , and acidified with HCl to

give a product, needles, m. above 300° (EtOH). VI (R = H, X = CO_2H) was

also methylated by the procedure of Asahina and Inubuse (cf. CA 26,

2196); the product gave 2 spots on the paper partition chromatogram. The

authors

believed that this product was a mixture of VI (R = Me, X = H), and VI (R

and X = H). VI (R = Me, X = CO_2H) was methylated with CH_2N_2 to yield

needles, m. $207-8^\circ$.

IT 35136-12-0, Furo[3,2-c]quinolin-4(5H)-one 67735-87-3,

Furo[3,2-c]quinolin-4(5H)-one, 3-methyl- 108677-40-3,

Furo[3,2-c]quinoline-2-carboxylic acid, 4,5-dihydro-5-methyl-4-oxo-

108677-41-4, Furo[3,2-c]quinoline-2-carboxylic acid,

4,5-dihydro-4-oxo-, methyl ester 108648-17-5,

Furo[3,2-c]quinoline-2-carboxylic acid, 4,5-dihydro-5-methyl-4-oxo-,

methyl ester 108693-05-7, Furo[3,2-c]quinoline-2-carboxylic

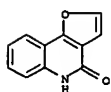
acid, 4,5-dihydro-4-oxo-

(preparation of)

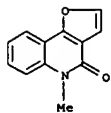
RN 35136-12-0 CAPLUS

CN Furo[3,2-c]quinolin-4(5H)-one (6CI, 9CI) (CA INDEX NAME)

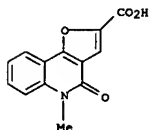
L7 ANSWER 241 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



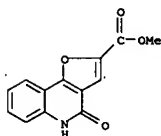
RN 67735-57-3 CAPLUS
CN Furo[3,2-c]quinolin-4(5H)-one, 5-methyl- (6CI, 9CI) (CA INDEX NAME)



RN 108677-40-3 CAPLUS
CN Furo[3,2-c]quinoline-2-carboxylic acid, 4,5-dihydro-5-methyl-4-oxo- (6CI) (CA INDEX NAME)



RN 108677-41-4 CAPLUS
CN Furo[3,2-c]quinoline-2-carboxylic acid, 4,5-dihydro-4-oxo-, methyl ester (6CI) (CA INDEX NAME)



L7 ANSWER 242 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN

AN 1960:39089 CAPLUS

DN 54:39089

OREF 54:77051, 7706a-1, 7707a

TI Structure and properties of certain polycyclic indolo- and quinoline derivatives. XIII. The cyclization of certain 4-pyridyl- and 4-quinolyl hydrazones

AU Mann, Frederick G.; Prior, A. F.; Willcox, Trevor J.

CS Univ. Chem. Lab., Cambridge, UK

SO Journal of the Chemical Society, Abstracts (1959) 3830-4

CODEN JCSAAZ; ISSN: 0590-9791

DT Journal

LA Unavailable

OS CASREACT 54:39089

AB cf. C.A. 54, 536c. The final stage in the preparation of 4-pyridyl(I)

and

4-quinolylhydrazine (II) was considerably improved. In preliminary work, the 4-pyridyl-(III) and 4-quinolylhydrazones (IV) of cyclohexanone (V)

were cyclized to 6,7,8,9-tetrahydro- γ -carboline (VI) and its 3,4-benzo derivative (VII), resp. The main object of the investigation was the

similar cyclization of the corresponding hydrazones (VIII) (IX) of

1,2,3,4-tetrahydro-1-methyl-4-oxoquinoline (X) and its 1-phenyl (XI)

analog, which would have given derivs. of great structural interest, but

cyclization to X and XI could not be achieved. 4-Chloropyridine (12.6

g.) and 4.9 g. N2H4.H2O in 40 cc. EtOH refluxed 2 hrs., cooled to 0°,

the HCl salt collected, washed with EtOH, and crystallized gave 14 g.

I.HCl, m. 242-3° (MeOH); benzaldehyde derivative m. 200°. V(2 g.) in 4 cc.

AcOH refluxed 3 hrs. with 3.2 g. I.HCl and 5.4 g. NaOAc in 6 cc. H2O, the

mixture left 1 hr. in 20 cc. H2O and 6 cc. NH4OH, and the solid collected

gave 2.6 g. III, m. 168-70° (darkening) (aqueous MeOH). III (2 g.) and

6 g. powdered ZnCl2 heated 10 min. at 240°, extracted with 40 cc.

refluxing H2O containing 5 cc. dilute HCl, the extract cooled, and the

isolated product recrystd. gave 2.8 g. chlorozincate (XII) of VI, m. 275-6°

(dilute HCl). An aqueous solution of XII left 4 hrs. with excess NH4OH

gave what was apparently the dihydroxydichlorozincate, m. 223-4°. A hot aqueous

solution of XII when treated with a large excess of 10% NaOH gave VI, m.

269-71° (aqueous alc.). Dehydrogenation of VI with Pd-C was briefly

investigated without success. X (1.3 g.) in 12 cc. alc. added to 3.5 g.

I.HCl and 9.7 g. NaOAc in 16 cc. 40% AcOH refluxed 5 hrs., poured into

excess NH4OH, and the gum recrystd. gave 2 g. VIII, m. 181-2° (aqueous

MeOH). VIII in excess MeI set aside 1 hr. or refluxed 1 hr. with

MeOH-MeI gave the monomethiodide, m. 228-9° (MeOH). VIII and MeI in MeNO2

when similarly refluxed gave the di-MeI derivative, m. 202-3°

(decomposition) (MeOH). VIII (1 g.) in 10 cc. saturated alc.-HCl

rapidly deposited the crystalline HCl salt. The mixture refluxed 5 hrs., cooled, and

basified deposited VIII. The use of 2N HCl with heating 1.5 hrs. gave the same

result. VIII (0.4 g.) and 2 g. ZnCl2 heated 10 min. at 200°, the

cold melt extracted with hot 10% HCl, and the extract treated with

concentrated HCl gave the chlorozincate of VIII, m. 320-2° (dilute HCl). Another

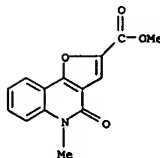
crystalline form m. 314° (decomposition). Fusion of VIII with ZnCl2 1

hr. at

L7 ANSWER 241 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

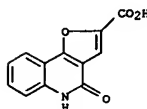
RN 108848-17-5 CAPLUS

CN Furo[3,2-c]quinoline-2-carboxylic acid, 4,5-dihydro-5-methyl-4-oxo-, methyl ester (6CI) (CA INDEX NAME)



RN 108993-85-7 CAPLUS

CN Furo[3,2-c]quinoline-2-carboxylic acid, 4,5-dihydro-4-oxo- (6CI) (CA INDEX NAME)



L7 ANSWER 242 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

270° gave the same results. BF3 in 15 cc. AcOH (40% soln.) added

to 0.9 g. VIII in 15 cc. AcOH, the mixt. refluxed 1 hr., poured into H2O,

and basified gave 1.1 g. boron contg. needles, m. 208-10°. This

was unaffected by refluxing alc.NH3 or C5H5N but hot 10% NaOH gave VIII.

VIII (0.2 g.) in 5 cc. concd. H2SO4 heated 10 min. at 130° poured on ice,

and basified gave the monohydrated (76-) sulfonic acid, m. 344-6°

(decompn.). The acid was insol. in org. solvents but freely sol. in

mineral acids and in warm 10% NaOH. VIII in H2SO4 was unaffected at room

temp. and at 180° underwent hydrolysis to H2O-sol. constituents.

XI (1.76 g.) in 40 cc. alc. refluxed 6 hrs. with 4.64 g. I.HCl and 13 g.

NaOAc in 30 cc. 40% AcOH, poured into dil. NH4OH, cooled to 0°, and

the pptd. product crystd. gave 2.4 g. IX, yellow plates, m. 212°

(darkening) (MeOH); acetate m. 252° (decompn.); MeI deriv., yellow

needles, m. 289° (decompn.); chlorozincate m. 225-40°

(decompn.) (H2O). Cyclohexane-1,2-dione (1.8 g.), 5.2 g. I.HCl, and 12

g. NaOAc in 20 cc. alc. heated 1.5 hrs. under N gave 3 g.

cyclohexane-1,2-dione bis(4-pyridylhydrazones) (XIII), m. 223-5°

(EtOAc); dipicrate m. 130-60°; dimethiodide m. 236-7°

(decompn.). XIII when heated at atm. pressure gave a distillate of

4-aminopyridine, m. 158-61°; picrate m. 216-18° (H2O).

N2H4.H2O (4.4 g.) refluxed 1.5 hrs. with 13 g. 4-chloroquinoline in 40

cc. EtOH gave 13.5 g. II.HCl, m. 311° (decompn.). V (0.93 g.), 2 g.

II.HCl, and 2.52 g. NaOAc heated 1 hr. under N in 6 cc. H2O and 4 cc.

AcOH gave 2 g. IV, m. 144-5° (50% aq. alc.); HCl salt m. 329-30°

(alc.). IV (1.5 g.) and 6 g. ZnCl2 inserted in an oil bath at

245°, stirred until the internal temp. reached 235°, removed, the glassy product dissolved in 30 cc. dil. HCl, basified, the

crude product sublimed at 220°/0.2 mm., and finally chromatographed

on Al2O3 gave VII, m. 292-3° (Et2CO3); picrate, yellow needles, m.

263-6° (alc. contg. 5% Me2CO). VII and Pd-C heated 2 hrs. at

250° gave a small amt. of sublimate, m. 323-5°, probably

3,4-benzo- γ -carboline. X (0.8 g.), 2 g. II.HCl, and 5 g. NaOAc

refluxed 4 hrs. with 20 cc. 40% AcOH, cooled, and poured into NH4OH

gave IX, yellow needles, m. 210°, picrate, orange, m.

232-4°. IX heated with ZnCl2 at 200° was recovered

unchanged but decompd. at higher temps. IX (0.3 g.) and 1.2 g. ZnCl2

immersed in a bath at 255°, stirred until the internal temp.

reached 215°, cooled, digested with 10 cc. dil. HCl, and basified

gave after sublimation at 200°/0.01 mm. an orange yellow sublimate,

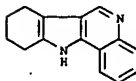
m. 370-80°, in too small a yield for identification.

IT 61760-43-8, 11H-Indolo[3,2-c]quinoline, 7,8,9,10-tetrahydro-

(and derivs.)

RN 61760-43-8 CAPLUS

CN 7H-Indolo[3,2-c]quinoline, 8,9,10,11-tetrahydro- (9CI) (CA INDEX NAME)

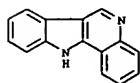


IT 239-09-8, 11H-Indolo[3,2-c]quinoline

(preparation of)

RN 239-09-8 CAPLUS

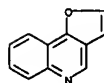
L7 ANSWER 242 OF 273 CAPLUS COPYRIGHT 2005 ACS ON STN (Continued)
CN 11H-Indolo[3,2-c]quinoline (6CI, 7CI, 8CI, 9CI) (CA INDEX NAME)



L7 ANSWER 243 OF 273 CAPLUS COPYRIGHT 2005 ACS ON STN
AN 1959:7160 CAPLUS
DN 53:7160
OREF 53:1386c-e
TI Halomethylidihydrofuranoquinolines
IN Timmler, Helmut; Andersag, Hans
PA Farbenfabriken Bayer Akt.-Ges.
DT Patent
LA Unavailable
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 937588		19560112	DE	

AB o-Allylhydroxyquinolines react smoothly with halogens at low temperature to yield the hydrohalides of halomethylidihydrofuranoquinolines, which can serve for the preparation of drugs. Solvents, such as CS₂, or haloalkanes, are used. Thus, 4-hydroxy-3-allylquinoline 10 in HOAc 100 is treated with stirring at room temperature with Br 7.8 parts. After a short time the HBr salt of 4'-bromomethylidihydrofurano-2',3',3,4'-quinoline (m. 235°) ppts. It is dissolved in hot H₂O, purified with C, and precipitated with aqueous NaOAc to give the free base (I) 12 parts, m. 147°. Similarly are prepared the following derivs. of I (substituent and m.p. given): 6-EtO, 151°; 6-MeO, 138°; 6-NHAc, 212°; 8-EtO, 152°, and 8-MeO, 175°. Also from 8-methoxy-4-hydroxy-3-allyl-2-carbomethoxyquinoline, the 8-methoxy-2-carbomethoxy derivative of I, m. 152°; from 7-allyl-8-hydroxyquinoline, (4'-bromomethylidihydrofurano-2',3',7,8-quinoline, m. 108° (EtOH)).
IT 234-07-1, Furo[3,2-c]quinoline (derivs.)
RN 234-07-1 CAPLUS
CN Furo[3,2-c]quinoline (8CI, 9CI) (CA INDEX NAME)

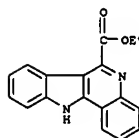


L7 ANSWER 244 OF 273 CAPLUS COPYRIGHT 2005 ACS ON STN
AN 1958:88136 CAPLUS
DN 52:88136
OREF 52:15555c-1,15556a-1,15557a-g
TI The alkaloids of Tabernanthe iboga. VI. The synthesis of the selenium dehydrogenation products from ibogamine
AU MacPhillamy, H. B.; Dziemian, R. L.; Lucas, R. A.; Kuehne, M. E.
CS Ciba Pharm. Products, Inc., Summit, NJ
SO Journal of the American Chemical Society (1958), 80, 2172-8
CODEN: JACSAT; ISSN: 0002-7863
DT Journal
LA Unavailable
OS CASREACT 52:88136
GI For diagram(s), see printed CA Issue.
AB cf. C.A. 52, 4748g, 11092c. p-MeC₆H₄NH₂ (33° g.), 180 cc. absolute EtOH, and 420 g. ZnCl₂ heated 8 hrs. at 275° in an autoclave, cooled to 100-25°, vented with N, poured into about 1 l. NH₄OH, extracted with Et₂O, the extract worked up, the residues from 5 such batches combined, and the distillate collected below 170°/15-16 mm. fractionated twice gave 320 g. 2,4-EtMeC₆H₃NH₂ (I), b. 222-30°; the crude I treated with 410 cc. Ac₂O, cooled to room temperature, diluted with an equal volume of petr. ether, and filtered yielded 114 g. I, m. 130-3° (EtOH); 2nd crop, 56 g. The crude intermediate N-Ac derivative (75 g.) of I refluxed 2 hrs. with 600 cc. concentrated HCl, cooled, and filtered yielded 66.0 g. I.HCl, m. 207-12°. Na₂SO₄ (522 g.) in 464 cc. H₂O, 66.0 g. I.HCl in 600 cc. H₂O, and 84.2 g. NH₄OH.HCl in 384 cc. H₂O added successively to 68.6 g. CCl₃CH(OH)₂ in 916 cc. H₂O, the mixture heated with stirring during 55 min. to boiling, cooled, the gummy precipitate crystallized (MeOH), the crude product (93 g.) added in portions with stirring at 60-70° to 224 cc. concentrated H₂SO₄, the mixture heated 10 min. to 80°, poured into 2.4 l. crushed ice, and the precipitate recrystd. (MeOH) yielded 41.6 g. 7-ethyl-5-methylisatin (II), m. 182-5°. II (36.97 g.) added to 48.3 g. NaOH in 384 cc. H₂O, cooled to 20°, treated dropwise during 1 hr. at 25-30° with 48.3 cc. 30% H₂O₂ in 193 cc. H₂O, stirred 3 hrs. at room temperature, treated with 1 g. C, stirred again 5 min., filtered, and the filtrate cooled, treated dropwise with 170 cc. cold HCl (2:1), and filtered gave 30.68 g. 3,5,2-EtMe(H₂N)C₆H₂CO₂H (III), m. 150-3° (EtOH). (CH₂CO₂Et)₂ (14.7 g.), 10.3 g. o-H₂NC₆H₄CO₂Et, and 2.14 g. NaOH in 140 cc. dry PhMe refluxed 3 hrs. with stirring, kept overnight, treated slowly with 75 cc. 10% HCl, and filtered gave 4.5 g. IV (R = Et), m. 210-13° (EtOH); a 1.0-g. portion in 10 cc. EtOH containing 3 cc. 20% aqueous NaOH refluxed 1.5 hrs., the EtOH distilled, and the residue heated 2 hrs. with 10 cc. 20% H₂SO₄ on the steam bath and filtered hot gave 820 mg. IV (R = H), m. 322-3° (decomposition). (CF₃CO)₂O (34 cc.) added with stirring below 10° dropwise to 7.40 cc. 90% H₂O₂ and 130 cc. CH₂Cl₂, the mixture treated at 5-6° with 11.36 g. III in 70 cc. CH₂Cl₂ in portions, kept 1 hr. in ice, warmed to room temperature, washed with H₂O, dried, evaporated in vacuo at room temperature to 30 cc., and filtered, and the

L7 ANSWER 244 OF 273 CAPLUS COPYRIGHT 2005 ACS ON STN (Continued)
residue recrystd. (EtOH) yielded 8.12 g. 3,5,2-EtMe(O₂N)C₆H₂CO₂H (V), m. 199-201°. V (9.60 g.) and 96 cc. SOCl₂ refluxed 1.5 hrs., and the excess SOCl₂ evapd. gave the crude acid chloride; Mg (1.18 g.), 2.4 cc. abs. EtOH, and 9 drops CCl₄ refluxed 5 min., dild. with 36.2 cc. Et₂O, treated dropwise with 7.85 cc. CH₂(CO₂Et)₂ in 14.4 cc. Et₂O and 2.4 cc. abs. EtOH, refluxed 3 hrs., treated dropwise with stirring with the crude acid chloride in 35 cc. dry Et₂O, refluxed 15 min., cooled, treated with 5.6 cc. concd. H₂SO₄ in 45 cc. H₂O, the aq. layer extd. with Et₂O, the combined org. layer and ext. washed, dried, evapd., the residual red oil (16.6 g.) refluxed 4 hrs. with 13.5 cc. glacial AcOH, 9 cc. H₂O, and 1.7 cc. concd. H₂SO₄, cooled, basified with 20% aq. NaOH, extd. with Et₂O, and the ext. worked up gave 8.59 g. 3,5,2-EtMe(O₂N)C₆H₂Ac (VI), b. 0.1 115-18°, m. 43-5°. o-O₂NC₆H₄Ac (8.43 g.), 7.0 cc. PhNHNH₂, and 1.0 cc. glacial AcOH in 16.8 cc. EtOH refluxed 6 hrs. and refrigerated overnight yielded 11.0 g. o-O₂NC₆H₄CO₂Me:NHPh, m. 80-1° (EtOH); a 10.0-g. portion in 150 g. polyphosphoric acid heated slowly to 75-80°, kept 20 min. at 75-80°, cooled, poured into iced H₂O, extd. with Et₂O, and the ext. worked up yielded 6.7 g. 2-(o-nitrophenyl)indole, m. 140-1°. VI (7.3 g.) and 32.6 cc. concd. HCl stirred on the steam bath, treated during 1 hr. with 13.1 g. granular Sn in portions, heated 0.5 hr. with stirring, cooled, basified with 30% aq. NaOH, steam-distd., and the product isolated from the distillate with Et₂O yielded 4.5 g. 3,5,2-EtMe(H₂N)C₆H₂Ac (VII), yellow oil. VII (4.5 g.), 9.45 g. abs. EtOH, 0.6 cc. glacial AcOH, and 4.72 cc. PhNHNH₂ refluxed 6 hrs., evapd. in vacuo, the residue dissolved in C₆H₆, the soln. dried, evapd., the residual oil heated slowly with 100 g. polyphosphoric acid to 37-42°, kept 25 min. at 37-42°, heated 3-4 min. to 75°, cooled to room temp., dild. with about 200 cc. ice and H₂O, stirred, neutralized with 20% aq. NaOH, extd. with Et₂O, and the ext. worked up gave 7.9 g. brown oily residue which, recrystd. (EtOH) yielded 4.3 g. 2-(2-amino-3-ethyl-5-methyl)indole (VIII), m. 136-8° (EtOH). 2-(o-Aminophenyl)indole (IX) (100 mg.) in 50 cc. dry Et₂O and 0.5 cc. (COCl)₂ kept 15 min. at room temp. and filtered yielded 83 mg. oxamide of IX, m. 285-6°. IX (2.0 g.) and 1.95 g. p-MeC₆H₄SO₂Cl in 25 cc. dry C₅H₅N kept 1 hr. at room temp., heated 1 hr. on the steam bath, poured into iced H₂O, extd. with Et₂O, the ext. worked up, and the residual glass treated with MeOH gave 2.38 g. cryst. 2-[o-(p-toluenesulfonamido)phenyl]indole (X), m. 138-9° (MeOH). X (2 g.) in 100 cc. dry Et₂O and 0.5 cc. (COCl)₂ in 10 cc. dry Et₂O kept 4 hrs. at room temp. yielded 2.3 g. 2-[o-(p-toluenesulfonamido)phenyl]-3-indoleglyoxyloxy chloride (XI), m. 135-6°. XI (2 g.) in 50 cc. abs. EtOH contg. 10% HCl refluxed 1 hr., concd. to about 1/3 the original vol., cooled, dild. with EtOH, warmed, basified with NH₄OH, dild. with H₂O, and filtered yielded 830 mg. Et 11H-indolo[3,2-c]quinoline-6-carboxylate, m. 215-17° (EtOH). VIII (4.2 g.) in 42.4 cc. dry C₅H₅N and 3.6 g. p-MeC₆H₄SO₂Cl kept at room temp. overnight, heated 1 hr. on the steam bath, cooled, poured into 50 cc. cold H₂O, and the gummy ppt. rubbed, filtered, and recrystd. (EtOH) yielded 5.42 g. 2-[3-ethyl-5-methyl-2-(p-toluenesulfonamido)phenyl]indole (XII), m. 187-8°. XII (1.21 g.) added to 2.0 cc. glacial AcOH, 0.3 cc. 37% aq. CH₂O, and 1.1 cc. 25% aq. Me₂NH, kept 24 hrs. at room temp., poured into 50 cc. 30% aq. AcOH and enough glacial AcOH to make the soln. acid to Congo red, filtered, the filtrate neutralized with concd. NH₄OH, and the ppt. filtered gave 980 mg. 3-dimethylaminomethyl-2-[3-ethyl-5-methyl-2-(p-toluenesulfonamido)phenyl]indole (XIII), m. 199-201° (decompn.) (EtOAc). XIII (930 mg.) in 12 cc. EtOH treated with 1.4 g. NaCN in 3 cc. H₂O, refluxed 40 hrs., cooled, dild. with 25 cc. H₂O,

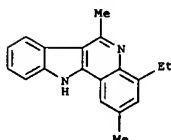
L7 ANSWER 244 OF 273 CAPLUS COPYRIGHT 2005 ACS ON STN (Continued)
acidified with concd. HCl, extd. with Et2O, the ext. worked up, the
cryst.
residue (850 mg.) refluxed 23 hrs. with 10 cc. 20% alc. KOH, evapd., the
residue dissolved in H2O, the soln. washed with Et2O, acidified with 50%
HCl, and the ppt. recrystd. (aq. EtOH) gave 550 mg.
2-[3-ethyl-5-methyl-2-
(p-toluenesulfonamido)phenyl]-3-indole-acetic acid (XIV), m.
172-4°. XIV (620 mg.), 620 mg. PhOH, and 6.5 cc. glacial AcOH
contg. 30% HBr refluxed 20 min., poured into 50 cc. dry Et2O, and
filtered
yielded 60 mg. crude lactam, m. 220-50°; a 50-mg. portion refluxed
22 hrs. with 250 mg. LiAlH4 in 20 cc. Bu2O and the crude material (30
mg.)
recrystd. (EtOH) and sublimed at 0.03-0.04 mm. yielded 8 mg.
4-ethyl-5,6,7,12-tetrahydro-2-methylindolo[3,2-d][1]benzazepine, m.
186-7°. p-MeC6H4NH2 (37.2 g.), 42.6 g. MeCH:CHCO2Et, and 1.0 cc.
glacial AcOH refluxed 2 days under N and distd. yielded 6.0 g. unchanged
p-MeC6H4NH2 and 43.0 g. p-MeC6H4NHCHMeCH2CO2Et (XV), b1 128-9°,
n20D 1.5195. XV (43.0 g.) in 260 cc. dry C5H5N treated with cooling with
77.0 g. p-MeC6H4SO2Cl, kept 48 hrs. at room temp. or heated 15 min. on
the
steam bath, poured into H2O, extd. with Et2O, and the ext. worked up gave
71.0 g. pale yellow oil; the crude product in 310 cc. MeOH stirred 48
hrs.
with 78 cc. H2O and 137 cc. 10% aq. KOH, poured into 1 l. H2O, acidified,
extd. with Et2O, the Et2O ext. reextd. with aq. NaHCO3, and the alk. ext.
acidified and extd. with Et2O gave 20.0 g. p-MeC6H4(p-
MeC6H4SO2)NCHMeCH2CO2H (XVII), m. 138-9° (C6H6-heptane); the
NaHCO3-extd. Et2O layer washed, dried, and evapd. gave 29.6 g.
p-(p-MeC6H4SO2NH)C6H4Me (XVIII), m. 116-17°. XVI (1.4 g.) in 30 cc.
Et2O treated with cooling with excess CH2N2 in Et2O yielded 1.4 g. Me
ester of XVII, m. 78-9° (Et2O-heptane); a 1.0-g. portion stirred 15
hrs. at room temp. with 5.0 cc. MeOH, 1.2 cc. H2O, and 2.1 cc. 10% KOH
yielded 0.39 g. XVI and 0.40 g. XVII. XVI (6.9 g.) in 40 cc. dry CS2
refluxed 1 hr. under N with 4.2 g. PCl5, cooled in ice, treated with 3.5
cc. SnCl4 in 20 cc. CS2, stirred 1 hr., treated with 2.0 g. powd. AlCl3,
stirred 15 hrs., poured into dil. HCl, and extd. with Et2O gave 6.2 g.
2,3-dihydro-2,6-dimethyl-1-(p-toluenesulfonyl)-4(1H)quinolone (XVIII), m.
167-8°; 2,4-dinitrophenylhydrazones, m. 149-50° (decompn.)
(CH2Cl2-EtOH). Crude XVIII (4.8 g.) in 25 cc. glacial AcOH refluxed 3
hrs. under N with 25 cc. concd. HCl and 12 cc. H2O, cooled, poured into
H2O, basified with NaOH, extd. with Et2O, and the ext. worked up gave
0.80
g. 2,3-dihydro-2,6-dimethyl-4(1H)-quinolone, m. 123-4°
(Et2O-heptane). 2,4-EtMeC6H3NH2 (9.8 g.), 9.0 g. MeCH:CHCO2Et, and 0.3
cc. glacial AcOH refluxed gently 2 days under N and distd. gave 8.0 g.
forerun and 7.2 g. crude 2,4-EtMeC6H3NHCHMeCH2CO2Et (XIX), b0.3
120-3°; the crude XIX in 20 cc. Et2O dild. with petr. ether (b.
30-60°) pptd. 0.20 g. 2,4-EtMeC6H3NHCOCH:CHMe (XX) m. 157-8°
(C6H6-heptane); distn. of the mother liquor from XIX gave 6.9 g.
2,4-EtMeC6H3NHCHMeCH2CO2Et, b0.3 120-2°, n20D 1.5150; the forerun
(8.0 g.) again heated with 8.0 g. MeCH:CHCO2Et gave an addnl. 4.9 g. XIX
and 0.20 g. XX. XIX (10.8 g.) in 57 cc. dry C5H5N treated with cooling
with 17.2 g. p-MeC6H4SO2Cl, kept 48 hrs. at room temp., dild. with 200
cc.
H2O, extd. with Et2O, the crude residue (18.1 g.) from the ext. stirred
20

L7 ANSWER 244 OF 273 CAPLUS COPYRIGHT 2005 ACS ON STN (Continued)
hrs. at room temp. with 68 cc. MeOH, 17 cc. H2O, and 30 cc. 10% aq. KOH,
poured into H2O, acidified, extd. with Et2O, and the ext. worked up gave
3.5 g. 2,4-EtMeC6H3(p-MeC6H4SO2)NCHMeCH2CO2H (XXI), m. 151-2°
(C6H6-heptane); the original Et2O soln. yielded 5.4 g.
p-(2,4-EtMeC6H3NHCO2S)C6H4Me, m. 89-90° (C6H6-heptane). XXI (2.0
g.), 1.5 g. PCl5, and 40 cc. dry CS2 refluxed 1 hr. under N, cooled,
treated with 0.60 cc. SnCl4 in 4 cc. CS2, stirred 1 hr. at room temp.,
treated with 2.0 g. AlCl3, stirred 15 hrs., refluxed 8 hrs., cooled,
poured into dil. HCl, extd. with Et2O, the ext. worked up, the residual
crude cyclization product (1.8 g.) refluxed 15 hrs. with 11 cc. glacial
AcOH, 5 cc. H2O, and 11 cc. concd. HCl, the cooled soln. poured into H2O,
extd. with Et2O, and the ext. worked up yielded 0.56 g.
2,3-dihydro-8-ethyl-2,6-dimethyl-4(1H)quinolone, m. 87-8°
(Et2O-heptane). VIII (100 mg.) in 10 cc. EtOH contg. 1 cc. AcH soln.
(250
mg./cc.) kept 5 min. at room temp., treated with 5 cc. 20% HCl, kept 0.5
hr. at room temp., and filtered yielded 92 mg. 4-ethyl-2,6-dimethyl-11H-
indolo[3,2-c]quinoline - HCl (XXII.HCl), m. above 300° (EtOH). The
XXII.HCl (75 mg.) in about 3 cc. hot EtOH treated with 10 cc. NH4OH
yielded 52 mg. XXII, m. 194-5° (EtOH); mixed m.p. with the Se
dehydrogenation product of ibogamine, m. 195-7°.
IT 110559-97-7, 11H-Indolo[3,2-c]quinoline-6-carboxylic acid, ethyl
ester 110532-92-8, 11H-Indolo[3,2-c]quinoline,
4-ethyl-2,6-dimethyl- 110532-93-9, 11H-Indolo[3,2-c]quinoline,
4-ethyl-2,6-dimethyl-, hydrochloride
(preparation of)
RN 110559-97-7 CAPLUS
CN 11H-Indolo[3,2-c]quinoline-6-carboxylic acid, ethyl ester (6CI) (CA
INDEX
NAME)

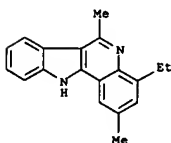


RN 110532-92-8 CAPLUS
CN 11H-Indolo[3,2-c]quinoline, 4-ethyl-2,6-dimethyl- (6CI) (CA INDEX NAME)

L7 ANSWER 244 OF 273 CAPLUS COPYRIGHT 2005 ACS ON STN (Continued)



RN 110532-93-9 CAPLUS
CN 11H-Indolo[3,2-c]quinoline, 4-ethyl-2,6-dimethyl-, hydrochloride (6CI)
(CA INDEX NAME)



● HCl

L7 ANSWER 245 OF 273 CAPLUS COPYRIGHT 2005 ACS ON STN
RN 1958-61271 CAPLUS
DN 52:61271
OREF 52:11093e-1,11094a-1,11095a-1,11096a-1,11097a-d
TI The alkaloids of Tabernanthe iboga. IV. The structures of ibogamine,
ibogaine, tabernanthine, and voacangine
AU Bartlett, M. F.; Dickel, D. F.; Taylor, W. I.
CS C I B A Pharm. Prods., Inc., Summit, NJ
SO Journal of the American Chemical Society (1958), 80, 126-36
CODEN: JACSAT; ISSN: 0002-7863
DT Journal
LA Unavailable
OS CASREACT 52:61271
GI For diagram(s), see printed CA issue.
AB The structures (X, R, R' = H; R = MeO, R' = H; and R = H, R' = MeO) were
elucidated for II, I, and VI, resp., and structure XI for IX. I (0.5 g.)
in 7.5 cc. AcOH and 1.5 cc. 49% HBr refluxed 3.5 hrs. under N, diluted
with
H2O, basified, filtered, and the amorphous residue treated with HCl gave
noribogaine-HCl (XII.HCl), m. 310° (decomposition), [α]D
-36.5° (H2O). Powdered I (5 g.) added with stirring to 0.37 g. Na in
100 cc. dry liquid NH3, the mixture treated dropwise after 20 min. with
1.03
cc. MeI in 40 cc. Et2O, the NH3 evaporated, the residue triturated with
CH2Cl2, the extract evaporated, and the residue dissolved in C6H6 and
passed
through 25 g. Al2O3 gave 4.1 g. N-Me derivative (XIII) of I, m. 104-6°
(EtOH), [α]D -33° (CHCl3). XIII (500 mg.) demethylated in
the usual manner in AcOH-HBr and the product purified through its
oxalate,
m. 200°, and sublimed at 180° and 0.03 mm. yielded glassy
alloibogaine (XIV); XIV.HCl, m. 294-6° (decomposition) (EtOH),
[α]D -58° (MeOH). I subjected to a KOH fusion and the crude
product purified through its oxalate, m. 200°, gave XIV. Iodine
(2.48 g.) in 40 cc. tetrahydrofuran added dropwise with stirring to 2 g.
I
in 50 cc. tetrahydrofuran and 40 cc. H2O containing 2.7 g. NaHCO3,
diluted with
H2O and CH2Cl2, cooled, and the organic layer worked up gave 2.1 g.
lactam
(XV) of I, m. 218-20° (EtOH), [α]D -9° (rotations were
measured in EtOH at 26° except where indicated otherwise). XV
refluxed with 2N HCl or 25% aqueous KOH, or treated with BzH and NaOMe,
remained unaffected. I (1 g.) in 10 cc. pyridine added slowly to 1 g.
CrO3 in 17 cc. pyridine with cooling, kept 20 hrs. at room temperature,
concentrated
in vacuo, filtered, the filtrate extracted with CH2-Cl2, and the extract
worked
up gave 0.44 g. XV, m. 221° (MeOH), [α]D -16°. XV
(100 mg.) in 20 cc. tetrahydrofuran refluxed 4 hrs. with 150 mg. LiAlH4,
diluted with a few drops of H2O, filtered, and evaporated gave 60 mg. I,
m.
146-8°, [α]D -48° (EtOH). I (5.0 g.) oxidized with
CrO3 in the usual manner, and the crude product chromatographed on 100 g.
Al2O3 with CH2Cl2 gave 1.86 g. XV, m. 220-1°, and 0.21 g.
oxoibogaine lactam, m. 318-20° (decomposition) (MeOH-Et2O), [α]D
-49°. Tetrahydrocarbazole (XVI) (5 g.) in 50 cc. pyridine treated
20 hrs. with 5 g. CrO3 in 85 cc. pyridine, filtered, the solid triturated
with CH2Cl2, the extract washed with dilute aqueous NaOH, dilute H2SO4,
and H2O, the
acidic extract basified with alkali, extracted with CH2Cl2, the extract
evaporated, and

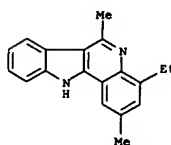
L7 ANSWER 245 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)
 the dark brown residue (0.63 g.) sublimed at 200°/0.03 mm. gave the 4-oxo deriv. of XVI, m. 225° (MeOH-Et2O) (sublimed at 145°/0.04 mm.). I (1.0 g.) in 10 cc. pyridine and 5 cc. H2O added to 1.0 g. CrO3 in 17 cc. pyridine, kept 20 hrs. at room temp., filtered, the filtrate basified, extd. with CH2Cl2, the ext. worked up, the residue (1.18 g.) chromatographed on 20 g. Al2O3, and the product (600 mg.) in Et2O kept several weeks at 0° gave a small amt. of hydroperoxyindolenine deriv. of I, m. 228-9° (Me2CO-Et2O). XV (0.5 g.) refluxed 3.5 hrs. under N with 7.5 cc. AcOH and 1.5 cc. 49% HBr, cooled, and basified gave the lactam (XVII) of XII, m. 184-6° with foaming (EtOH). XVII treated with KOH and Me2SO4 in Me2CO gave XV. XV (1 g.) in 50 cc. CHCl3 ozonized about 40 min. at 0°, refluxed 3 hrs. with 15 cc. HCO2H and 3.5 cc. H2O2, dild. with H2O, the aq. layer evapd., and the residue treated with excess CH2N2 and distd. yielded Me oxamate, m. 118°, and 190 mg. di-Me ester, b.p. 0.130°, [α]_D 14°, of XVIII. II oxidized with iodine and NaHCO3 in the usual manner gave the lactam (XIX) of II. II (1.0 g.) oxidized with CrO3 yielded 0.31 g. XIX, m. 329-31° (decompn.) (MeOH), reduced to II. The lactam of IV, m. 312-15° (decompn.) (Et2O-CH2Cl2), was obtained similarly by both methods; it gave on reduction IV. VII (3.0 g.) in 30 cc. pyridine added slowly to 5.0 g. CrO3 in 50 cc. pyridine, kept 18 hrs. at room temp., evapd., the residue triturated with CH2Cl2, filtered, the filtrate washed with small portions of satd. aq. NaCl, dried, evapd., and the residue (2.29 g.) chromatographed on Al2O3 with 99.9:0.1 CH2Cl2-MeOH yielded 0.89 g. lactam of VII, m. 171-2° (MeOH-Et2O). V (290 mg.) in 10 cc. pyridine and 290 mg. CrO3 in 3 cc. pyridine kept 22 hrs. at room temp. yielded 140 mg. (crude) lactam (XX) of V, m. 334-7° (decompn.) (MeOH-Et2O). XV (2.0 g.) in 150 cc. C6H6 and 20 cc. EtOH aerated with heating during 1 day while illuminated with long-wave ultraviolet irradiation gave 0.8 g. hydroperoxyindolenine deriv. (XXI) of XV, m. 334-7° (decompn.) (MeOH-Et2O). The XXI refluxed 2 hrs. with 2.5 g. NaOH in 40 cc. 87% aq. NaOH, concd., acidified, extd. with CH2Cl2, and the ext. worked up gave 0.32 g. XX, m. 343-6° (MeOH). I (4 g.) and 6 g. Se heated 12 min. at 180-300°, then kept 18 min. at 300-17°, cooled, powdered, extd. with C6H6 overnight, the ext. evapd., and the residue extd. selectively gave a trace of alkali-sol. material, 2% AcOH-sol. material, 0.5N H2SO4 sol. product, and neutral material. The neutral fraction (1.5 g.) chromatographed on 25 g. Al2O3 yielded 35 mg. 4-ethyl-5,6,7,12-tetrahydro-9-methoxy-2-methylindolo[3,2-b]benzazepine (XXII), m. 208°. XXII and NaNO2 in AcOH gave the N-NO deriv. (XXIII) of XXII, needles, m. 204-5° (EtOH). XXIII treated with CuCl and concd. HCl yielded XXII. XXII treated 2.5 hrs. with NaOAc and Ac2O at 110° gave the N-Ac deriv. of XXII, needles, m. 246° (EtOH), which was recovered unchanged after treatment with NaNO2 and AcOH. The 2% AcOH-sol. material (9.68 g. from 79.5 g. I) chromatographed on 70 g. Al2O3 yielded 1.13 g. I and 0.91 g. 4-ethyl-8-methoxy-2,6-dimethyl-11H-indolo[3,2-c]quinoline (XXIV), plates, m. 100 and 156°, needles, m. 100 and 176°; the dimorphic forms hand-sepd. and sublimed at 140°/0.01 mm. gave XXIV, m. 178°. XXIV (30 mg.) heated 2.5 hrs. at 130° with excess MeI gave XXIV-MeI, m. above 300° (MeOH). The 0.5N H2SO4-sol. material (2.5 g.) chromatographed over 30 g. Al2O3 and the C6H6 eluate (0.586 g.)

L7 ANSWER 245 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)
 mg. and 900 mg. NH2OH.HCl (30 cc. pyridine refluxed 40 hrs. under N, evapd. in vacuo, and the residue chromatographed on Al2O3 gave 700 mg. unchanged XXXIII and 100 mg. oxime (XXXIV) of XXXIII, m. 279-81° (MeOH-Et2O), [α]_D -149° (pyridine). XXXIV (310 mg.) and 310 mg. XXXIX in 10 cc. pyridine refluxed 2 hrs. under N, dild. with 10 cc. H2O, refluxed 1 hr., and worked up gave 20 mg. 2,4-acNH(MeO)C6H3CN (XXXV), m. 155-6°, and 70 mg. XXXI, characterized as XXXII (50 mg.), m. 115-16°, [α]_D -216°. Further elution of the column (which had yielded XXXIII) with 99:2 CH2Cl2-MeOH gave the oxindole deriv. (with 0.25H2O) (XXXVI) of VIII, m. 191-7° (Me2CO). XXXI (255 mg.) in CH2Cl2 kept overnight with excess ClCN, evapd., and the residue dissolved in C6H6, washed with dild. H2SO4, concd., and dild. with Et2O yielded 3.3 g. XXXVII, m. 96-7° (sublimed), [α]_D -76°. XXXVII (380 mg.) and 300 mg. LiAlH4 refluxed 12 hrs. in 10 cc. tetrahydrofuran yielded 280 mg. 8-ethyl-6-methyl-4-hydroxydecahydroquinoline; a 260-mg. portion heated 6 hrs. at 330° in a sealed evacuated tube with 360 mg. Se and the basic material isolated yielded 63 mg. 8-ethyl-6-methylquinoline (XXXVIII) which with picric acid gave 80 mg. picrate (XXXIX) of XXXVIII, m. 154-5° (EtOH). 2,4-EtMeC6H3NH2 (1.31 g.), 2.4 cc. glycerol, 1.39 g. As2O5, and 1.5 cc. concd. H2SO4 heated 4 hrs. at 140-50°, dild. with H2O, basified, extd. with Et2O, and the crude basic product treated with picric acid gave XXXIX. I (1.0 g.) and 400 mg. BrCN in 30 cc. dry C6H6 filtered after several hrs. from 600 mg. 1-HBr, the filtrate worked up, and the residue crystd. from EtOH yielded 30 mg. N-cyanoopobogaine (XL), m. 208-9°, [α]_D -165° (CHCl3); the mother liquor gave a material which contained 13.32% Br and exhibited an ultraviolet spectrum essentially identical with that of 5-methoxyindole. MnO4 (840 mg.) in 15 cc. Me2CO added slowly during 4 hrs. at room temp. to 203 mg. XL in 15 cc. Me2CO, the mixt. filtered, treated with gaseous SO2, filtered, and the solid (100 mg.) crystd. from EtOH contg. a trace of H2O gave XLI, 0.5H2O, m. 196°. XLI, 0.5H2O and CH2N2 yielded the Me ester (XLII) of XLI, m. 186° (MeOH), [α]_D 112° (CHCl3). XLI (50 mg.) and 1 cc. 2N HCl heated 12 hrs. in a sealed tube at 100°, cooled, and the deposit crystd. from 2N HCl or MeOH-EtOAc gave XLIII, m. 201° (decompn.). XLIII refluxed in aq. AcOH contg. maleic acid and Pd gave the typical spectrum for the tetrahydro analog. Me3COCl in CC14 (2.33 cc. 0.27M) added slowly to 200 mg. aricine (XLIV) in 10 cc. cold CH2Cl2 contg. 1 drop Et3N, warmed after 2 min. to room temp., washed, dried, evapd., and the residue treated with a few drops alc. HCl and recrystd. from EtOH-Et2O yielded dehydroaricine HCl salt, m. 201° (decompn.). XLIV (100 mg.), 30 mg. maleic acid, and 40 mg. Pd black refluxed 2 hrs. in 50% AcOH, cooled, filtered, concd., treated with a few drops alc. HCl, and recrystd. from EtOH-EtOAc gave tetrahydroaricine HCl salt, m. 185° (decompn.). CHCl3 (2 cc.) added slowly with stirring to 2 g. II in 100 cc. Me3COH contg. 0.55 g. K, the Me3COH distd. after 1 hr., the residue dild. with H2O, and the product isolated with CH2Cl2 gave 1.72 g. material yielding on recrystn. from EtOH 0.67 g. II; the residue from the mother

L7 ANSWER 245 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)
 treated with 400 mg. picric acid gave 210 mg. picrate of C20H24N2O, m. 165-7° (EtOH). II (4.3 g.) and 6 g. Se heated during 35 min. from 180 to 315° and the product dissolved in C6H6 and extd. selectively yielded a trace of NaOH-sol. material, 280 mg. 2% AcOH-sol. product, 110 mg. 0.5N H2SO4-sol. material, and 2.28 g. neutral portion. The neutral material chromatographed on 30 g. Al2O3 yielded 1.04 g. oily material (XXV) and 150 mg. 4-ethyl-5,6,7,12-tetrahydro-2-methylindolobenzazepine, m. 187° (EtOH). The 2% AcOH-sol. material chromatographed on 10 g. Al2O3 yielded 101 mg. 4-ethyl-2,6-dimethyl-11H-indolo[3,2-c]quinoline (XXVI), m. 196-7°; XXVI.HCl, m. above 320° (EtOH-H2O). The crude H2SO4-sol. material distd. at 0.02 mm. and the oily distillate (78.9 mg.) treated with picric acid yielded 50 mg. picrate of C19H22N2, m. 179° (EtOH); the free base (from 20 mg. picrate) showed absorption max. at 224 and 274, plateaus at 268-72, 290-1, and a shoulder at 285 mμ. XXV (800 mg.) kept 24 hrs. in 50 cc. AcOH, 11 cc. concd. H2O2, and 0.2 cc. 1% NH4 molybdate, basified, extd. with CH2Cl2, the ext. evapd., the residual oil (0.54 g.) heated 40 min. on the steam bath with 5 cc. MeOH and 10 cc. 50% HCl, washed with CH2Cl2, basified, extd. with CH2Cl2, and the residue from the ext. sublimed yielded 26 mg. o-H2NC6H4COEt, m. 44-5°, I (99 g.) in 1.5 l. C6H6 slowly aerated 40 hrs. under an ultraviolet lamp, the C6H6 distd., the dark brown residue refluxed 3 hrs. in 1.75 l. 80% EtOH contg. 280 g. NaOH, kept at room temp. overnight, and the cryst. deposit (33.3 g.) recrystd. from MeOH yielded 31 g. pure VIII, m. above 140°. VIII (2 g.) and 2 g. NH2OH.HCl in 40 cc. abs. EtOH contg. 1.8 g. Na heated 24 hrs. in a sealed tube at 140° under N, poured onto crushed ice, extd. with CH2Cl2, and the ext. worked up yielded 1.44 g. oxime (XXVII) of VIII, m. 293-4° (95% EtOH), [α]_D -151° (pyridine). VII (1.21 g.) yielded similarly 0.6 g. oxime (XXVIII), m. 273-6°, [α]_D -183° (pyridine). XXVII (5.0 g.) and 5.0 g. p-MeC6H4SO2Cl (XXIX) in 150 cc. pyridine heated 2 hrs. under N, dild. with H2O, refluxed 1 hr., 2 such mixts. combined, evapd. at 17 mm., the residue dild. with H2O, adjusted with aq. NaOH to pH 10, extd. with CH2Cl2, the dried ext. evapd., and the residue chromatographed on Al2O3 yielded a light yellow oil which, dissolved in 10 cc. Ac2O and kept at room temp. overnight, yielded 1.82 g. 2,5-acNH(MeO)C6H3CN (XXX), m. 179-80° (pure tetrahydrofuran); the Ac2O mother liquors dild. with CH2Cl2, extd. with 5% H2SO4, the ext. washed with CH2Cl2, basified, extd. with CH2Cl2, and the ext. worked up gave 1.82 g. XXXI, b.p. 3.92°. XXXI (190 mg.) and 0.44 cc. BzH in 25 cc. 95% EtOH and 1.0 cc. 5N NaOH kept 1 hr. at room temp., dild. with H2O, and the product isolated with Et2O yielded 110 mg. benzylidene deriv. (XXXII) of XXXI, m. 115°, [α]_D -208°. XXXII (360 mg.) refluxed 2 hrs. with 360 mg. XXIX in 10 cc. pyridine yielded 50 mg. o-acNH(C6H4)CN, m. 134-5°; the mother liquors yielded 70 mg. XXXI, converted to XXXII, m. 113-14°, [α]_D -204°. IV (500 mg.) in 50 cc. EtOAc oxidized in the presence of 300 mg. prerduced PtO2 with 44 cc. O during 4.5 hrs., filtered, evapd., the residue in 20 cc. EtOAc hydrogenated 0.5 hr. over 100 mg. PtO2, filtered, treated with 2 cc. 50% aq. NaOH, and refluxed 3 hrs., and the product isolated with CH2Cl2 and chromatographed on Al2O3 gave 50 mg. IV and 280 mg. pseudoindoxyl deriv. (XXXIII) of IV, m. 168-70°. Crude XXXIII (900

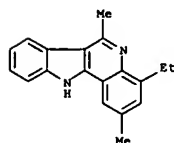
L7 ANSWER 245 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)
 liquor chromatographed with C6H6 gave 0.64 g. (dichloromethyl)indolenine deriv. of I, m. 140°. CHCl3 (17 cc.) added slowly with stirring to 10 g. XVI and 4.7 g. K in 250 cc. Me3COH and worked up after 2 hrs. in the usual manner gave 3.4 g. 11(dichloromethyl)carbazoline (XLV), m. 158-9°. XLV (2.04 g.) refluxed 16 hrs. under N in 100 cc. EtOH contg. 20 cc. 5N KOH, the EtOH distd., and the product (1.1 g.) isolated with CH2Cl2 and chromatographed on 23 g. Al2O3 yielded 0.44 g. unchanged XLV and 0.51 g. lactam of o-H2NC6H4C(=CHCl)(CH2)4CO2H (XLVII), m. 194-5° (EtOH-H2O); the alk. concentrate from this run brought to pH 6 and extd. 48 hrs. with Et2O yielded 0.7 g. oily XLVI which, treated with CH2N2 and distd., gave the Me ester, b.p. 0.110-20° (bath). The 7-MeO deriv. of XVI (1.5 g.) kept 2.5 hrs. at 40° in 1.5 l. petr. ether and filtered yielded 11-hydroperoxy-7-methoxycarbazoline (XLVIII), m. 104° (decompn.) (EtOAc). XLVII (1 g.) in 15 cc. EtOAc hydrogenated over a Pt catalyst gave 800 mg. 11-HO analog (XLVIII) of XLVII, m. 145° (Me2CO). XLVIII (0.66 g.) in 12 cc. 50% aq. EtOH contg. 0.5 g. KOH refluxed 0.5 hr. and the product isolated with Et2O gave 7-methoxy-2,2-tetramethylenepseudoindoxyl (XLIX), m. 137.5-9° (EtOH-H2O). XLIX refluxed 4 hrs. with excess NH2OH.HCl in excess pyridine gave the oxime (L) of XLIX, m. 204-5° (EtOH). L (100 mg.) in 3 cc. pyridine refluxed 2 hrs. under N with 100 mg. XXIX, dild. with 3 cc. H2O, refluxed 1 hr., and worked up in the usual manner gave a crude material which, treated 48 hrs. at room temp. with 1 cc. Ac2O and 2 cc. pyridine, yielded XXXV, m. 155-6° (tetrahydrofuran). p-MeOC6H4NHCOCH:NOH (3 g.) added with stirring to 90% H2SO4 at 50-70°, heated 10 min. at 80°, cooled, poured onto 250 cc. crushed ice, and filtered gave 1.9 g. 5-methoxyisatin (LI), m. 201-3° (H2O). LI refluxed in pyridine with excess NH2OH.HCl gave the oxime (LII) of LI, m. 236°. LII (9 g.) and 10 g. PC15 mixed under 100 cc. Et2O, the Et2O removed, and the residue heated to 90-100° in vacuo gave 3.5 g. sublimed 2,5-H2N(MeO)C6H3CNO (LIII), m. 98°. The LIII dissolved in excess dild. alkali and acidified yielded 2.1 g. 2,5-H2N(MeO)C6H3CNO, m. 40°, which with Ac2O gave XXX, m. 179-80°. V, m. 284-8° (decompn.), was isolated from autoxidized I by the method of Goutarel (Dissertation, Paris, 1954). The compds. p-MeOC6H4NH2 and ACHECO2Et yielded by the method of Stephen, et al. (C.A. 42, 15911), 3-ethyl-6-methoxy-2-methyl-4-quinolinol, m. 293-5° (decompn.). 110532-92-8, 11H-Indolo[3,2-c]quinoline, 4-ethyl-2,6-dimethyl-110532-93-9, 11H-Indolo[3,2-c]quinoline, 4-ethyl-2,6-dimethyl-4-hydrochloride 119010-79-0, 11H-Indolo[3,2-c]quinoline, 4-ethyl-8-methoxy-2,6-dimethyl- [preparation of]

RN 110532-92-8 CAPLUS
 CN 11H-Indolo[3,2-c]quinoline, 4-ethyl-2,6-dimethyl- (6CI) (CA INDEX NAME)



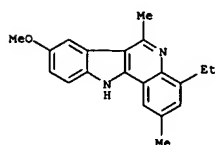
L7 ANSWER 245 OF 273 CAPLUS COPYRIGHT 2005 ACS ON STN (Continued)

RN 110532-93-9 CAPLUS
 CN 11H-Indolo[3,2-c]quinoline, 4-ethyl-2,6-dimethyl-, hydrochloride (6CI)
 (CA INDEX NAME)

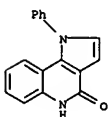


● HCl

RN 113010-79-0 CAPLUS
 CN 11H-Indolo[3,2-c]quinoline, 4-ethyl-8-methoxy-2,6-dimethyl- (6CI) (CA INDEX NAME)



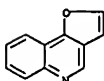
L7 ANSWER 246 OF 273 CAPLUS COPYRIGHT 2005 ACS ON STN (Continued)
 109-12* (petr. ether); 4-chloro-3,2',-chloroethylquinoline (0.13 g.), 0.12 g. PhOH, and 0.22 g. I heated 3 hrs. at 170-80° (bath temp.), the whole treated with 2N NaOH, extd. with CHCl₃, and the CHCl₃ soln. concd. (finally at 110°/0.1 mm.) gave 0.092 g. IX.
 4-Chloro-4',5'-dihydrofuran(2',3',2,3)quinoline (1 g.), 1 g. PhOH, and 2 g. I as above gave 0.615 g. V.
 IT 109594-45-8, 4H-Pyrrolo[3,2-c]quinolin-4-one, 1,5-dihydro-1-phenyl- (preparation of)
 RN 109594-45-8 CAPLUS
 CN 4H-Pyrrolo[3,2-c]quinolin-4-one, 1,5-dihydro-1-phenyl- (6CI) (CA INDEX NAME)



L7 ANSWER 246 OF 273 CAPLUS COPYRIGHT 2005 ACS ON STN
 AN 1958:15796 CAPLUS
 DN 52:15796
 OREF 52:2856h-1,2857a-d
 TI Preparation of a pyrrolo[3',2',3,4]quinolone from (2-ethoxyethyl)malondianilide
 AU Grondon, M. F.; McCorkindale, N. J.
 CS Univ. Glasgow, UK
 SO Journal of the Chemical Society, Abstracts (1957) 3448-50
 CODEN: JCSAAZ; ISSN: 0590-9791

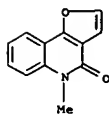
DT Journal
 LA Unavailable
 AB The intermediate in the preparation (C.A. 50, 10721d) of dihydrofuranquinolone from PhNH₂ (I) and EtO(CH₂)₂CH(CO₂Et)₂ (II) is probably PhNHCOCH(CO₂Et)[(CH₂)₂OEt] (III); when (PhNHCO)CH(CO₂Et) (IV) was used in place of III, a new product, Cl₇H₁₄N₂O, was formed. Thus, 50 g. II and 40.1 g. I, diffused with N, and heated 4 hrs. at 180-90° (bath temperature) gave 52.4 g. IV, m. 161-2° (EtOH). IV (11.3 g.) and 50 cc. Ph₂O heated under reflux (H₂O and EtOH allowed to escape) gave 5.14 g. 1,2,4',5'-tetrahydro-2-oxo-1'-phenylpyrrolo[3',2',3,4]quinoline (V), pale brown prisms, m. 246-7° (CSH₅N), λ 232 (ε 41,700), 268 (s) (ε 9100), 331 mμ (ε 13,200), ν (KBr) 1640 (s) cm.⁻¹ V (0.5 g.), 15 cc. Ph₂O, and 0.2 g. 10% Pd-C refluxed 15 hrs., the whole filtered, and the filtrate diluted with petr. ether gave 0.32 g. 1,2-dihydro-2-oxo-1'-phenylpyrrolo[3',2',3,4]quinoline (VI), m. 252-4° (from EtOH), λ 238,274,284,315,328 mμ (ε 63,100, 72,000, 6900, 9600, 11,200), ν (KBr) 1650 (s) cm.⁻¹ VI (0.5 g.) and 5 cc. POCl₃ refluxed 1 hr., the whole concentrated in vacuo, and the residue treated with H₂O gave 0.45 g. 2-chloro-4',5'-dihydro-1'-phenylpyrrolo[3',2',3,4]quinoline (VII), m. 143-4° (EtOH); hydrochloride, yellow prisms, m. 180-6°, ν (KBr) 2421 (s) cm.⁻¹ V (1 g.) and 10 cc. HCl heated 1 hr. at 150-60°, the whole cooled, diluted with H₂O, extracted with CHCl₃, and the CHCl₃ solution concentrated gave 0.15 g. 1,2,4',5'-tetrahydro-2-oxofurano[3',2',3,4]quinoline, pale yellow prisms, m. 276-8°. 2-Chloro-4',5'-dihydrofuran(3',2',3,4)quinoline (2 g.), 1.5 g. KOH in 150 cc. EtOH, and 1 g. 10% Pd-C were hydrogenated during 2.5 hrs. at atmospheric pressure, the whole filtered, the filtrate concentrated, the residue extracted with CHCl₃, the CHCl₃ exts. shaken with several portions aqueous AcOH, the combined AcOH exts. made alkaline with aqueous NaOH, extracted with CHCl₃, and the CHCl₃ exts. concentrated gave 4',5'-dihydrofuran(3',2',3,4)quinoline (VIII), m. 95-6° (petr. ether). VIII (0.5 g.) and 5 cc. POCl₃ as above gave 40% 4-chloro-3'-chloroethylquinoline, m. 75-6° (petr. ether). VII (0.157 g.), 15 cc. EtOH, and 0.1 g. 10% Pd-C under atmospheric pressure, the whole filtered, the filtrate evaporated, the residue in C₆H₆CHCl₃ chromatographed on alumina and eluted with C₆H₆CHCl₃ gave 0.074 g. 4',5'-dihydro-1'-phenylpyrrolo[3',2',3,4]quinoline (IX), m.

L7 ANSWER 247 OF 273 CAPLUS COPYRIGHT 2005 ACS ON STN
 AN 1958:6381 CAPLUS
 DN 52:6381
 OREF 52:1158d-h
 TI Furoquinolines. IX. Synthesis of 5-methylfuro[3,2-c]quinolin-4(5H)-one via Perkin rearrangement of 3-bromo-5,6-dihydro-6-methyl-2H-pyrano[3,2-c]quinoline-2,5-dione
 AU Ohta, Tatsuo; Mori, Yo
 CS Tokyo Coll. Pharm.
 SO Pharmaceutical Bulletin (1957), 5, 80-1
 CODEN: PHBUA9; ISSN: 0369-9471
 DT Journal
 LA Unavailable
 AB cf. C.A. 51, 16457f. This synthesis of 5-methylfuro[3,2-c]quinolin-4(5H)-one (I) is new and unambiguous. 1-Methyl-4-hydroxycarbostyryl (6 g.) in 32 cc. concentrated H₂SO₄ heated 3 hrs. on an H₂O bath with 11.5 g. malic acid (Brown, et al., C.A. 50, 12085h), cooled, poured into 300 g. AcONa in 1250 cc. H₂O, reheated, kept overnight, and the separated solid washed with NaHCO₃ yielded 1.1 g. 5,6-dihydro-6-methyl-2H-pyrano [3,2-c]quinoline-2,5-dione (II), m. 225-7° (EtOH). II (0.5 g.), in 25 cc. AcOH kept 1 week in a sealed tube with 6 cc. 10% BrAcOH solution yielded 0.5 g. 3-Br derivative of II, m. 260° (AcOH), and this (0.7 g.) heated 1 hr. on an H₂O bath with 60 cc. 10% KOH, cooled, diluted, filtered, the solid from the acidified filtrate treated immediately with NaHCO₃, and the NaHCO₃-soluble portion acidified yielded by the Perkin rearrangement 0.4 g. 4,5-dihydro-5-methyl-4-oxofuro[3,2-c]quinoline-2-carboxylic acid (III), m. above 300° (absolute EtOH), methylated by CH₂N₂ in MeOH to the Me ester, m. 207-8° (EtOH). III (0.2 g.) decarboxylated by heating 30 min. at 170-80° and then 20 min. at 180-200° with 3 cc. quinoline and 0.1 g. Cu powder, cooling, dissolving in 10% HCl, extracting the filtrate with CHCl₃, and washing the residue from the CHCl₃ extract with NaHCO₃ yielded I, m. 132-3° (dilute EtOH), identical with a sample prepared by a previous method (C.A. 51, 16457f).
 IT 234-07-1, Furo[3,2-c]quinoline (deriva.)
 RN 234-07-1 CAPLUS
 CN Furo[3,2-c]quinoline (8CI, 9CI) (CA INDEX NAME)

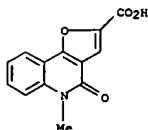


IT 67735-57-3, Furo[3,2-c]quinolin-4(5H)-one, 5-methyl-108677-40-3, Furo[3,2-c]quinoline-2-carboxylic acid, 4,5-dihydro-5-methyl-4-oxo- 108848-17-5, Furo[3,2-c]quinoline-2-carboxylic acid, 4,5-dihydro-5-methyl-4-oxo-, methyl ester (preparation of)
 RN 67735-57-3 CAPLUS

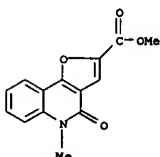
L7 ANSWER 247 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)
 CN Furo[3,2-c]quinolin-4(5H)-one, 5-methyl- (6CI, 9CI) (CA INDEX NAME)



RN 108677-40-3 CAPLUS
 CN Furo[3,2-c]quinoline-2-carboxylic acid, 4,5-dihydro-5-methyl-4-oxo- (6CI)
 (CA INDEX NAME)

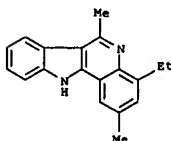


RN 108848-17-5 CAPLUS
 CN Furo[3,2-c]quinoline-2-carboxylic acid, 4,5-dihydro-5-methyl-4-oxo-,
 methyl ester (6CI) (CA INDEX NAME)

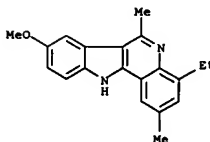


L7 ANSWER 248 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

L7 ANSWER 248 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 1957:90791 CAPLUS
 DN 51:90791
 GREF 51:16499a-e
 TI Iboga alkaloids. II. Structures of ibogaine, ibogamine, and tabernanthine
 AU Taylor, W. I.
 CS Ciba Pharm. Prods., Summit, NJ
 SO Journal of the American Chemical Society (1957), 79, 3298-9
 CODEN: JACSAT; ISSN: 0002-7863
 DT Journal
 LA Unavailable
 GI For diagram(s), see printed CA Issue.
 AB cf. C.A. 48, 11436b. Se dehydrogenation of I (R = OMe, R' = H) yielded 2 heterocyclic bases, II (R = MeO) and III (R = H). II (R = MeO) (weakly basic) m. 208°; N-nitroso derivative, m. 196°; N-Ac compound, m. 246°. The C-alkyl group of I is Et. The 2nd product, III (R = MeO), m. 176°. Se dehydrogenation of ibogamine, I (R = R' = H), yielded II (R = H), m. 214°, and III (R = H), m. 196-7°, which was identical to synthetic III (R = H). Tabernanthine is I (R = H, R' = OMe).
 IT 110532-92-8, 11H-Indolo[3,2-c]quinoline, 4-ethyl-2,6-dimethyl-113010-79-0, 11H-Indolo[3,2-c]quinoline, 4-ethyl-8-methoxy-2,6-dimethyl- (preparation of)
 RN 110532-92-8 CAPLUS
 CN 11H-Indolo[3,2-c]quinoline, 4-ethyl-2,6-dimethyl- (6CI) (CA INDEX NAME)

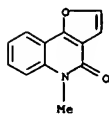


RN 113010-79-0 CAPLUS
 CN 11H-Indolo[3,2-c]quinoline, 4-ethyl-8-methoxy-2,6-dimethyl- (6CI) (CA INDEX NAME)

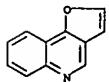


L7 ANSWER 249 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 1957:90705 CAPLUS
 DN 51:90705
 GREF 51:16457e-1,16458a
 TI Furoquinolines. VIII. Synthesis and hydrogenation of 3-methylfuro[3,2-c]quinolin-4-one
 AU Ohta, Tatsuo; Mori, Yo
 CS Tokyo Coll. Pharm.
 SO Proc. Japan Acad. (1956), 32, 769-73
 DT Journal
 LA Unavailable
 AB cf. C.A. 51, 8750h. To compare the behavior in catalytic hydrogenation with furo[2,3-b]quinoline, furo[3,2-c]quinolines were synthesized and similarly hydrogenated with PdO and H. 3-(β-Ethoxyethyl)-4-hydroxycarboxystyryl (0.1 g.) was refluxed 5 hrs. in 5 ml. Ph2O, cooled, petr. ether added, and resulting precipitate crystallized from pyridine, yielding 2,3-dihydrofuro[3,2-c]quinolin-4(5H)-one (I), m. 280-82°. To 2 g. dihydrofuroquinoline were added 4 ml. Me2SO4 and 5 ml. 50% KOH, the mixture stood several hrs., 50 ml. H2O added, the oily substance extracted with warm C6H6, the C6H6 extract washed with H2O, dried over CaCl2, chromatographed on alumina, and eluted with CHCl3, the solvent removed, and the residue crystallized from dilute EtOH, yielding 2,3-dihydro-5-methylfuro[3,2-c]quinolin-4-one (II), m. 137-8°, readily soluble in C6H6, CHCl3, and EtOH. Di-Et β-ethoxyethylmalonate (13.8 g.), 6.4 g. PhNMe2, and 50 ml. Ph2O was refluxed 6 hrs., the solvent removed in vacuo, and the oily residue crystallized from dilute EtOH yielding 6.6 g. II. Dihydromethylfuroquinoline (2.7 g.), 2.0 g. 10% Pd-C, and 30 ml. Ph2O was refluxed 14 hrs., the catalyst filtered off while hot, the filtrate cooled, the precipitate filtered off, the filtrate evaporated in vacuo, and the residue crystallized from dilute EtOH, yielding 5-methylfuro[3,2-c]quinolin-4-one, colorless needles, m. 132-3°. Furo[3,2-c]quinolin-4(5H)-one (III) (0.2 g.) in 200 ml. EtOH and 0.2 g. 5-methylfuro[3,2-c]quinolin-4-one (IV) in 60 ml. EtOH was, resp., hydrogenated with PdO at ordinary temperature and pressure yielding I and II, resp. Me N-butyl-N-methylanthranilate (V), b3-4 155-56, was prepared from 20 g. Me N-methylanthranilate and 20 g. (PrCO)2O by heating 2 hrs. on an H2O bath. V (12 g.) was cyclized to 3-ethyl-4-hydroxy-1-methylquinolin-2-one by gentle refluxing with 1.5 g. Na in PhMe solution (cf. C.A. 47, 10544c; 50, 13055c) to give a compound, m. 185° (from dilute EtOH). Hydrogenation of 0.1 g. III and 0.1 g. IV with 0.1 g. PtO2, resp., at atmospheric pressure and temperature gave 3-ethyl-4-hydroxyquinolin-2-one, m. 262°, and 3-ethyl-4-hydroxy-1-methylquinolin-2-one, m. 185°, resp. An attempted hydrogenolysis of 2,3-dihydrofuro[3,2-c]quinolin-4(5H)-one with PtO2 and H at ordinary pressure and temperature failed.
 IT 67735-37-3, Furo[3,2-c]quinolin-4(5H)-one, 5-methyl- (and its hydrogenation)
 RN 67735-37-3 CAPLUS
 CN Furo[3,2-c]quinolin-4(5H)-one, 5-methyl- (6CI, 9CI) (CA INDEX NAME)

L7 ANSWER 249 OF 273 CAPLUS COPYRIGHT 2005 ACS ON STN (Continued)



IT 234-07-1, Furo[3,2-c]quinoline
(deriva.)
RN 234-07-1 CAPLUS
CN Furo[3,2-c]quinoline (8CI, 9CI) (CA INDEX NAME)

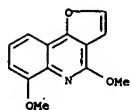


L7 ANSWER 250 OF 273 CAPLUS COPYRIGHT 2005 ACS ON STN (Continued)
EtOH and 90 cc. H₂O refluxed 3 hrs., with Ag₂O (from 6 g. AgNO₃), the
mixture filtered, the filtrate evapd., and the residue extd. with CHCl₃
gave
1.59 g. crude 4-chloro-2,3-dihydrofuro[2,3-b]quinoline (VI), purified by
chromatography on Al₂O₃, elution with C₆H₆, evapn., and crystn. from dil.
alc. to rods, m. 115-16°. Similarly, 0.5 g. Va was converted to
0.41 g. 4-chloro-2,3-dihydro-8-methoxyfuro[2,3-b]quinoline (VIa), m.
186-8°. Ph₂O (25 cc.) contg. 1 g. 4-chloro-3-(2-ethoxyethyl)-1,2-
dihydro-8-methoxy-2-quinolone (VII) refluxed 4 hrs., the cooled soln.
dild. with petr. ether and filtered from 0.33 g. VII, the filtrate concd.
and steam-distd. the residue crystd. from EtOH, and the crude crystal
product (0.28 g.) chromatographed from C₆H₆ on acid-washed Al₂O₃ and
eluted with C₆H₆ and CHCl₃ gave 0.40 g. VI. VI (0.5 g.) in NaOMe from
0.5 g. Na and 10 cc. MeOH refluxed 4 hrs., the mixture evapd., dild. with
H₂O, and extd. with CHCl₃, and the residue after evapn. chromatographed
on
Al₂O₃ from C₆H₆ and eluted with C₆H₆ gave 0.31 g. 2,3-dihydro-4-
methoxyfuro[2,3-b]quinoline (VIII), m. 104-5° (from petr. ether).
Similarly, VIa was converted and purified by chromatography in C₆H₆ over
Al₂O₃ to 2,3-dihydro-4,8-dimethoxyfuro[2,3-b]quinoline, m. 168-70°
VI (3 g.), 3.2 g. N-bromosuccinimide, and a trace of Bz₂O₂ refluxed 2
hrs.
in 100 cc. CCl₄, the mixture filtered at room temp., the filtrate evapd. in
vacuo, the residue refluxed 3 hrs. with 30 cc. PhNEt₂ and poured into 250
cc. 3N HCl, the mixture extd. with Et₂O, the ext. evapd., and the orange
solid (2.36 g.), m. 105-10°, chromatographed in C₆H₆ over Al₂O₃ and
eluted with C₆H₆ gave 2.05 g. 4-chlorofuro[2,3-b]quinoline (IX), m.
112-14° (from MeOH), also prepd. by refluxing 0.056 g.
nordictamine 1 hr. with 1 cc. POCl₃, evapn. in vacuo, dild. the residue
with H₂O, and crystg. the product (0.051 g.) from MeOH in the presence of
C. Via (1 g.) in 10 cc. Ph₂O refluxed 13 hrs. in the presence of 0.75 g.
10% Pd-C, the cooled mixture filtered, the filtrate treated with petr.
ether, the soln. decanted and evapd., the residue steam-distd. and extd.
with Et₂O, the ext. evapd., the product chromatographed in C₆H₆ over
Al₂O₃, the 1st yellow band eluted with C₆H₆, and the product crystd. from
alc. gave 0.05 g. 4-chloro-8-methoxyfuro[2,3-b]quinoline (IXa), m.
178-80°. Further elution with C₆H₆ gave 0.04 g. unchanged VIa, and
elution with 4:1 C₆H₆-CHCl₃ yielded 0.009 g.
2,3,4,5-tetrahydro-6-methoxy-
2-oxofuro[3,2-c]quinoline, m. 202-6°. VIa brominated and
dehydrobrominated as above and the crude product chromatographed in 20:1
C₆H₆-petr. ether and eluted with the same solvent gave 0.71 g. IXa. IX
(0.11 g.) refluxed 3 hrs. with 0.11 g. Na in 2.5 cc. MeOH, the mixture
evapd., treated with H₂O, and extd. with CHCl₃, the ext. evapd., the
yellow solid (0.11 g.) chromatographed on Al₂O₃, and the column eluted
with C₆H₆ gave 0.036 g. I, m. 132° (from petr. ether), λ
308, 312, 328 mμ (log ε 3.88, 3.86, 3.82), and infrared
spectrum identical with that of natural I. IX (1 g.) refluxed 10 hrs. in
5 cc. 10N HCl and 20 cc. alc., and the alc. evapd., the acid soln.
basified with 2N NaOH and extd. with CHCl₃, the aq. soln. acidified and
filtered, and the yellow ppt. (0.4 g.) sublimed at 190-5°/0.1 mm.
gave 0.24 g. nordictamine, m. 235-40°, infrared spectrum identical
with that of natural material. IXa (0.13 g.) refluxed 2 hrs. with 0.13
g.
Na in 3 cc. MeOH, the mixture freed from MeOH, dild. with H₂O, and extd.
with CHCl₃, the ext. evapd., and the residue washed with Et₂O gave 0.044
g. substance, m. 195-9°. The Et₂O washings evapd. and the yellow
gum chromatographed in C₆H₆ over Al₂O₃ and eluted with 4:1 C₆H₆-CHCl₃
yielded 0.025 g. II, m. 138-40° (from petr. ether), λ 308,
323, 334 mμ (log ε 3.87, 3.85, 3.79). Identical with the

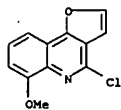
L7 ANSWER 250 OF 273 CAPLUS COPYRIGHT 2005 ACS ON STN
AN 1957:71524 CAPLUS
DN 51:71524
GREF 51:12939a-1,12940a-1
TI Synthesis of dictamine and γ-fagarine
AU Grondon, M. F.; McCorkindale, N. J.
CS Univ. Glasgow, UK
SO Journal of the Chemical Society, Abstracts (1957) 2177-85
CODEN: JCSAAZ; ISSN: 0590-9791
DT Journal
LA Unavailable
OS CASREACT 51:71524
AB The linear furo[2,3-b]quinoline structures of dictamine (I) and
γ-fagarine (II) have been established by synthesis from the angular
dihydrofuro[3,2-c]quinolones and confirmed by ultraviolet and infrared
spectroscopy and conversion of the intermediates to authentic
furo[2,3-b]quinoline (III). POCl₃ (50 cc.) and 7.91 g.
2,3,4,5-tetrahydro-4-oxofuro[3,2-c]quinoline refluxed 3.5 hrs., the
POCl₃ removed, and H₂O added, the precipitate (9.4 g.) chromatographed
in 1:1
C₆H₆-petr. ether (b. 60-80°) on Al₂O₃, eluted with the same
solvent, and the product crystallized from EtOH gave 6.74 g.
2,4-dichloro-3-(2-chloroethyl)quinoline (IV), m. 110-12°. Further
elution with the same solvent gave 0.73 g.
4-chloro-2,3-dihydrofuro[3,2-c]
quinoline, m. 162-3°. Similarly, 7.38 g. 2,3,4,5-tetrahydro-6-
methoxy-4-oxofuro[3,2-c]quinoline refluxed 3.5 hrs. with POCl₃ and the
excess reagent removed, the residue treated with H₂O, the brown solid
(7.5
g.) extracted with petr. ether leaving a residue, the extract
concentrated, and the
product (5.72 g.) crystallized from petr. ether gave 2,4-dichloro-3-(2-
chloroethyl)-8-methoxyquinoline (IVa), m. 108-9°. The residue
crystallized from alc. yielded 0.82 g.
4-chloro-2,3-dihydro-6-methoxyfuro[3,2-
c]quinoline, m. 162°. Based on the method of Rowlett and Lutz
(C.A. 40, 57292), 4.0 g. 2,4-dichloro-3-carbomethoxyquinoline was heated 2
hrs. in 112 cc. 6N HCl and 100 cc. dioxane, the solution treated with 1
1.
H₂O and filtered off, and the residue crystallized from EtOAc gave 1.63
g.
3-carbomethoxy-4-chloro-1,2-dihydro-2-quinolone, m. 202-3°.
Similarly, 1 g. 2,4-dichloro-3-(2-chloroethyl)quinoline refluxed 3 hrs.
in
28 cc. 6N HCl and 22 cc. dioxane, the mixture kept at room temperature
12 hrs.,
filtered, and the precipitate (0.45 g.) extracted with boiling dilute
MeOH
gave 0.26 g.
4-chloro-3-(2-chloroethyl)-1,2-dihydro-2-quinolone (VI), m. 174-5°
(from MeOH). Hydrolysis as above with heating discontinued after 70 min.
and the mixture kept at room temperature 12 hrs. gave 0.43 g. V.
Dilution of the
acid solution with H₂O precipitated 0.15 g. starting material.
Hydrolysis of 2.82
g. IVa in 79 cc. 6N HCl and 62 cc. dioxane produced 1.6 g.
4-chloro-3-(2-chloroethyl)-1,2-dihydro-8-methoxy-2-quinolone (Va), m.
190-3° (from MeOH), no color with FeCl₃. V (1.94 g.) in 130 cc.

L7 ANSWER 250 OF 273 CAPLUS COPYRIGHT 2005 ACS ON STN (Continued)
absorption max. of the natural alkaloid, as was the infrared spectrum;
picrate, m. 172-3°. 4-chloro-2,3-dihydrofuro[3,2-c]quinoline (0.17
g.) in MeOH refluxed 2 hrs. with 0.17 g. Na in MeOH, the mixture evapd.,
dild. with H₂O, and extd. with Et₂O, the ext. evapd., and the residue
crystd. from petr. ether gave 0.12 g. 2,3-dihydro-4-methoxyfuro[3,2-
c]quinoline, m. 81-2°. POCl₃ contg. 0.08 g. 4,5-dihydro-6-methoxy-
2-oxofuro[3,2-c]quinoline refluxed 1 hr., excess reagent evapd. and H₂O
added, the mixture filtered, and the ppt. crystd. from EtOH in the presence
of C gave 0.059 g. 4-chloro-6-methoxyfuro[3,2-c]quinoline, m.
133-4°, converted by NaOMe to 4,6-dimethoxyfuro[3,2-c]quinoline, m.
162-3° (from petr. ether). IX (0.98 g.), 2 cc. 80% NH₄H₂O, and 6
cc. alc. refluxed 3 hrs., the mixture evapd., the solid, m. 225-35°
(decomp.), refluxed 1 hr. with 10% aq. CuSO₄, the soln. made strongly
alk. with aq. NaOH and extd. with Et₂O, the ext. evapd., and the product
crystd. from petr. ether gave 0.192 g. furo[2,3-b]quinoline, m.
76-7°. The quinoline (0.2 g.) in 10 cc. Me₂CO treated dropwise in
1.5 hrs. with 0.6 g. KMnO₄ in 28 cc. Me₂CO, the mixture dild. with H₂O
and clarified with SO₂, the Me₂CO evapd., and the yellow solid (0.06 g.)
crystd. from alc. gave 3-carbomethoxy-2-hydroxyquinoline, m. 300-12°.
Earlier attempts to synthesize II employed
3-(2-ethoxyethyl)-2,4-dihydroxy-
8-methoxyquinoline (X) (cf. G., et al., C.A. 50, 10721d). The crude
product from 28.9 g. o-anisidine in CHCl₃, shaken with several portions
of
2N NaOH and the CHCl₃ soln. dried and evapd. gave 3.79 g.
2,3,4,5-tetrahydro-6-methoxy-4-oxofuro[3,2-c]quinoline, m. 218-20°.
The alk. washings acidified, extd. with CHCl₃, and the ext. evapd. gave
23.8 g. X, m. 123-30°. X (2.2 g.) in 200 cc. Et₂O contg. a few
drops MeOH treated with excess CH₂N₂ in Et₂O, the mixture kept 12 hrs. at
room temp. and evapd., the residue taken up in 50 cc. Et₂O, the soln.
concd. to 25 cc. and filtered, and the product crystd. from dil. MeOH
gave
1.32 g. 3-(2-ethoxyethyl)-1,2-dihydro-4,8-dimethoxy-2-quinolone, m.
122-3°. X (20 g.) and 200 cc. POCl₃ refluxed 1 hr., the excess
POCl₃ evapd., H₂O added, and the product crystd. from dil. alc. gave
22.14
g. 2,4-dichloro-3-(2-ethoxyethyl)-8-methoxyquinoline, m. 73-4°,
converted by refluxing 1.16 g. 2.5 hrs. in 28 cc. 6N HCl and 20 cc.
dioxane, keeping the mixture 12 hrs. at room temp., and purifying the
cryst.
ppt. by chromatography on Al₂O₃, elution with CHCl₃, and crystn. from
alc.
to VII, m. 162-3°. The conversion of VII to VIa in boiling Ph₂O
constituted an alternative synthesis of II with unfavorable yields.
Infrared absorption bands (KBr disc) and ultraviolet absorption max. (in
EtOH) for 2- and 4-quinolones and quinolines with an ether function in
the
2-position were tabulated. The results support the generalization that
2-quinolones show ultraviolet absorption at 270-285 mμ (ε
6300-9000) which is absent in 4-quinolones. Strong amide-carbonyl
infrared absorption occurs at 1660-1640 cm.⁻¹ in 2-quinolones whereas,
4-quinolones show weaker max. at lower frequencies. (1620-30 cm.⁻¹).
IT 110054-68-7, Furo[3,2-c]quinoline, 4,6-dimethoxy-
117372-51-7, Furo[3,2-c]quinoline, 4-chloro-6-methoxy-
(preparation of)
RN 110054-68-7 CAPLUS
CN Furo[3,2-c]quinoline, 4,6-dimethoxy- (6CI) (CA INDEX NAME)

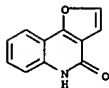
L7 ANSWER 250 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



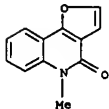
RN 117372-51-7 CAPLUS
CN Furo[3,2-c]quinoline, 4-chloro-6-methoxy- (6CI) (CA INDEX NAME)



L7 ANSWER 251 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

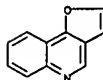


RN 67735-57-3 CAPLUS
CN Furo[3,2-c]quinolin-4(5H)-one, 5-methyl- (6CI, 9CI) (CA INDEX NAME)



L7 ANSWER 251 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN

AN 1957:47060 CAPLUS
DN 51:47060
GREF 51:87508-4, 8751a
TI Furoquinolines. VII. Synthesis of 5-methylfuro [3,2-c]-quinolin-4-one
AU Ohta, Tatsuo; Mori, Yo
CS Tokyo Coll. Pharm.
SO Pharmaceutical Bulletin (1956), 4, 415-16
CODEN: PHBUA9; ISSN: 0369-9471
DT Journal
LA Unavailable
AB cf. C.A. 50, 13055c. Me anthranilate (23 g.) and 20 g. EtOCH₂CH₂CH₂CO₂H heated 12 hrs. in an oil bath at 200-10°, cooled, and distilled in vacuo yielded 12 g. o-MeO₂CC₆H₄NHCO(CH₂)₃OEt, a slightly yellow liquid, b₉₋₁₀ 195-8°, and this was cyclized in solution in 75 cc. anhydrous PhMe by adding 1.1 g. Na at 60-5°, refluxing 3 hrs., adding EtOH to decompose excess Na, pouring into H₂O, and acidifying the aqueous alkaline layer with 10% H₂SO₄ to yield 3 g. 3-(β-ethoxy-ethyl)-4-hydroxycarbostyryl (I), colorless prisms, m. 139-40° (from EtOH); O-Ac derivative, m. 209-10°. I (2.7 g.) boiled 2 hrs. with 54 cc. concentrated HCl, cooled, and made alkaline with 10% KOH, was further cyclized to 2,3-dihydrofuro[3,2-c]quinolin-4(5H)-one (II), colorless rectangular plates, m. 286-7°. Catalytic dehydrogenation (10% Pd-C) of II in boiling Ph₂O according to Grundon, et al. (C.A. 50, 10721d), gave furo[3,2-c]quinolin-4(5H)-one (III), m. 249-50°, and this (0.5 g.) methylated by the alternate addition of 4 cc. 50% KOH and 2 cc. Me₂SO₄ gave from the C₆H₆ extract of the product the title compound (IV), colorless needles, m. 132-3°, undepressed by an authentic sample. No fluorescence in the usual organic solvents is shown by II, III, or IV, in contrast to furo[2,3-b]quinolines, which show a blue-violet fluorescence.
IT 234-07-1, Furo[3,2-c]quinoline (deriva.)
RN 234-07-1 CAPLUS
CN Furo[3,2-c]quinoline (8CI, 9CI) (CA INDEX NAME)

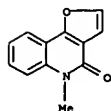


IT 35136-12-0, Furo[3,2-c]quinolin-4(5H)-one 67735-57-3,
Furo[3,2-c]quinolin-4(5H)-one, 5-methyl-
(preparation of)
RN 35136-12-0 CAPLUS
CN Furo[3,2-c]quinolin-4(5H)-one (6CI, 9CI) (CA INDEX NAME)

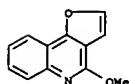
L7 ANSWER 252 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN

AN 1957:43348 CAPLUS
DN 51:43348
GREF 51:8094c-h
TI Synthesis of γ-fagarine
AU Tuppy, H.; Bohm, F.
CS Univ. Vienna
SO Monatshefte fuer Chemie (1956), 87, 774-7
CODEN: MOCHB7; ISSN: 0026-9247
DT Journal
LA Unavailable
AB cf. Grundon and McCorkindale, C.A. 51, 4402f; preceding abstract Na (7.0 g.) pulverized in hot xylene, the xylene decanted, the Na washed with ether, suspended in 400 ml. ether, under exclusion of moisture 48 g. freshly distilled and dried diethyl malonate rapidly but dropwise added, stirred for 12 hrs. at room temperature, chilled, 13.0 ml. ClCH₂COCl added with stirring, allowed to stand for 30 min. at room temperature, refluxed for 20 min., 21 ml. o-anisidine added, refluxed for 2 hrs., cooled, the reaction mixture washed with 200 ml. H₂O, the ether concentrated gave 6.6 g. α-carbethoxy-o-methoxyphenyliminotetronic acid (I), and another 5 g. by extraction of the ether mother liquor with 0.5N NaOH and acidification of the concentrated alkaline extract, m. 178° (from alc.). To 25 ml. paraffin oil at 270° was added rapidly 1.0 g. finely powdered I, the temperature brought quickly to 305° and held there for 60-75 sec., the solution cooled, diluted with 25 ml. ether, filtered, washed with ether, extracted for several hrs. with ether, the ether-insol. residue extracted with hot H₂O, and the H₂O cooled to give 59% 8-methoxy-4-hydroxy-3-oxo-2,3-dihydrofuro[2,3-b]quinoline (II), m. 312-18° (from H₂O). To an ice-cold solution of 1.32 g. II in 800 cc. MeOH was added over 1 hr. ethereal CH₂N₂ (from 20 g. nitrosomethylurea), after 2 hrs. the ether distilled, the residue leached with C₆H₆, the C₆H₆ removed, and the residue crystallized from alc. to give 16% 4,8-dimethoxy-3-oxo-2,3-dihydrofuro [2,3-b] quinoline (III) as bright yellow needles, m. 224-6° (from EtOAc). The C₆H₆-insol. material was crystallized from H₂O and EtOAc to give 28% 8-methoxy-9-methyl-3,4-dioxo-2,3,4,9-tetrahydrofuro[7,3-b]-quinoline (IV), m. 270° (decomposition). III was refluxed with 100-20 times its weight of a mixture of POCl₃ 30 and H₂O 1 part for 4 hrs., excess POCl₃ distilled, the residue poured on ice., decomposed with Na₂CO₃, filtered off, washed with H₂O, dried, sublimed, and crystallized from C₆H₆-petr. ether and alc. to give 41% 3-chloro-γ-fagarine (V), m. 120-1° or 137-8°. In the same manner IV gave 3-chloroiso-γ-fagarine (VI), m. 223-4° (from alc.). V (0.061 g.) in 70 ml. pure alc. was reduced with 0.070 g. Pd-CaCO₃, the alc. distilled, the residue digested with H₂O, the residue distilled at 140-170°/0.001 mm., the oil crystallized from alc., C₆H₆-petr. ether, and dilute alc. to give γ-fagarine, m. 138-40°. In the same manner omitting the distillation VI gave iso-γ-fagarine, m. 177-9° (from MeOH).
IT 67735-57-3, Furo[3,2-c]quinolin-4(5H)-one, 5-methyl-
120208-89-1, Furo[3,2-c]quinoline, 4-methoxy- 627086-17-3
, Furo[3,2-c]quinoline, 4-chloro-

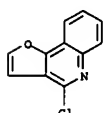
L7 ANSWER 252 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)
 RN 67735-57-3 CAPLUS
 CN Furo[3,2-c]quinolin-4(5H)-one, 5-methyl- (6CI, 9CI) (CA INDEX NAME)



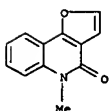
RN 120208-89-1 CAPLUS
 CN Furo[3,2-c]quinoline, 4-methoxy- (6CI) (CA INDEX NAME)



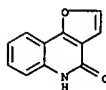
RN 627086-17-3 CAPLUS
 CN Furo[3,2-c]quinoline, 4-chloro- (9CI) (CA INDEX NAME)



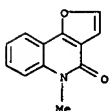
L7 ANSWER 253 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)
 RN 67735-57-3 CAPLUS
 CN Furo[3,2-c]quinolin-4(5H)-one, 5-methyl- (6CI, 9CI) (CA INDEX NAME)



L7 ANSWER 253 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 1957:43347 CAPLUS
 DN 51:43347
 OREF 51:80931,8094a-c
 TI Conversion of dictamine into isomers with the angular structure
 AU Tuppy, H.; Bohm, F.
 CS Univ. Vienna
 SO Monatshefte fuer Chemie (1956), 87, 735-40
 CODEN: MOCMB7; ISSN: 0026-9247
 DT Journal
 LA Unavailable
 AB cf. Grundon, et al., C.A. 50, 10721d; preceding abstract Dictamine (I, 0.2 g.), 2.5 ml. alc., and 0.6 ml. concentrated HCl refluxed for 6 hrs., concentrated to dryness, the residue dissolved in hot H₂O, clarified with NaOAc, the precipitate sublimed at 220-40°/0.01-0.02 mm. gave nordictamine (II), m. 250-2° (decomposition). POCl₃ (3 ml.) and 0.1 ml. H₂O allowed to stand for several hrs., 25 mg. II dissolved in 1 ml. of this mixture, refluxed 2.5 hrs., POCl₃ distilled, the residue treated with H₂O, filtered, sublimed gave 21 mg. 4-chlorofuro[2,3-b]quinoline (III), m. 117-8°. III (15 mg.) and 0.5 ml. 7% NaOMe in MeOH refluxed for 30 min., MeOH removed, the residue treated with H₂O, centrifuged, and the product sublimed gave 7.5 mg. I, m. 1324°. I (0.5 g.), 2.5 ml. HBr in HOAc, and 3 ml. HOAc were heated for 5 hrs. at 130° alkalized with NaOH, filtered, the filtrate acidified, filtered off, the precipitate taken up in hot alc., filtered, the filtrate diluted with H₂O, filtered off, and the precipitate sublimed to give 0.15 g. 4-oxo-4,5-dihydrofuro[3,2-c]quinoline (IV), containing a small amount. II. IV (0.1 g.), 3 ml. POCl₃, and 0.1 ml. H₂O refluxed 3 hrs. gave 94% 4-chlorofuro[3,2-c]quinoline (V), m. 118-19° (from dilute alc.). V refluxed with 7% NaOMe in MeOH gave 4-methoxyfuro[3,2-c]quinoline (VI), m. 53-4° (from dilute alc.). VI with MeI at 100° for 36 hrs. gave 4-oxo-5-methyl-4,5-dihydrofuro[3,2-c]quinoline (VII), m. 132-4° (from ether-petr. ether). VII was also obtained from IV by treatment with Me₂SO₂KOH.
 IT 35136-12-0, Furo[3,2-c]quinolin-4(5H)-one 67735-57-3, Furo[3,2-c]quinolin-4(5H)-one, 5-methyl- (preparation of)
 RN 35136-12-0 CAPLUS
 CN Furo[3,2-c]quinolin-4(5H)-one (6CI, 9CI) (CA INDEX NAME)



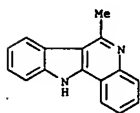
L7 ANSWER 254 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)
 RN 67735-57-3 CAPLUS
 CN Furo[3,2-c]quinolin-4(5H)-one, 5-methyl- (6CI, 9CI) (CA INDEX NAME)



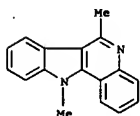
L7 ANSWER 254 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 1957:1804 CAPLUS
 DN 51:1804
 OREF 51:401a-1,402a-e
 TI Cyanine dyes derived from 2-methylindolo[3',2'-3,4]quinoline
 AU Mann, Frederick G.; Prior, A. F.
 CS Univ. Chem. Lab., Cambridge, UK
 SO Journal of the Chemical Society, Abstracts (1956) 1331-6
 CODEN: JCSAAZ; ISSN: 0590-9791
 DT Journal
 LA Unavailable
 AB cf. preceding abstract The title compound (I) and its 1',2-dimethyl homolog (II) readily gave quaternary salts in which the reactive 2-Me group condensed with suitable heterocyclic systems to yield cyanine and azadimethinecyanine salts. The properties of these salts as photographic sensitizers or desensitizers was investigated. (The cyanine derivs. described below were heated at 70-80°/0.2 mm. before analysis but certain members retained solvent of crystallization). I (2.1 g.) and 2.1 g. p-MeC₆H₄SO₃Me immersed in an oil bath and stirred with a thermometer, showed at 125° a vigorous reaction with effervescence, the temperature rising to 150°; the melt solidified, the cold pulverized melt extracted with 20 cc. boiling EtOH, and the insol. material collected, washed with hot EtOH, and dried gave 2.0 g. of the quinolinium salt (III), needles, m. 298-300° (decomposition) (from MeOH), its solns. in MeOH and water having a blue fluorescence. II similarly treated gave the quinolinium salt (IV), prisms, m. 243-4° (from EtOH). 2-Methylindolo-[1',2'-3,4]quinazoline treated as above yielded 68% quinazolinium salt, lemon-colored prisms, m. 258-60° (from EtOH), readily soluble in cold water to give a nonfluorescent bright yellow solution III (0.21 g.), 0.1 g. p-Me₂NC₆H₄CHO (V), 10 cc. Ac₂O, and 0.2 cc. Et₃N was refluxed 1 hr., and the crude product precipitated in poor yield; the combined material from many varied expts. crystallized from MeOH afforded the cyanine, orange-red needles, m. 307-8° (decomposition). III (0.85 g.) and 0.45 g. V in 40 cc. MeOH and 0.15 cc. piperidine (VI) refluxed 24 hrs., concentrated to half-volume, left overnight at 0°, and the crystalline deposit recrystd. from MeOH gave presumably dimethine-2-[1-methyl- ψ -indolo[3',2'-3,4]-quinoline] (p-dimethylaminobenzene)monomethanol solvate (VII). IV (0.87 g.) and 0.45 g. V in 40 cc. EtOH and 0.25 cc. VI refluxed 30 hrs., the solution concentrated, the concentrate cooled to 0°, and the deposited product recrystd. from EtOH gave the cyanine monoethanol solvate, bright red prisms, m. 266-7° (the monohydrate from another small run had the identical m.p.). III (0.21 g.), 0.25 g. 2,2'-acetanilidovinylbenzothiazole, 12 cc. EtOH, and 0.2 cc. Et₃N refluxed 1 hr. gave the cyanine iodide monohydrate, dark green tablets, m. 264° (decomposition) (from MeOH-pyridine (4:1 by volume)). III (0.85 g.), 0.5 g. p-Me₂NC₆H₄NO, 30 cc. MeOH, and 0.25 cc. VI boiled 10 hrs., the solution cooled to 0°, the crude product (0.40 g.) collected, and recrystd. from much MeOH yielded the cyanine sulfonate (VIII), crimson crystals, m. 310-11° (decomposition) (from HCONMe₂ (IX)). Repetition of the above experiment with twice the amount of VI gave 0.21

L7 ANSWER 254 OF 273 CAPLUS COPYRIGHT 2005 ACS ON STN (Continued)
 g. β -azadimethine-2-[1-methyl- ψ -indolo(3',2'-3,4)quinoline]
 [p-dimethylaminobenzene] (X), crimson needles, m. 281-1.5° (from
 IX). X with p-MeC₆H₄SO₃H in IX boiled 10 min. gave VIII, m. 309°
 (decompn.), mixed m.p. undepressed. 1,1'-Dimethylindocyanine sulfonate
 monohydrate, scarlet prisms, m. 275-6° (decompn.) (immersed at
 265°), was prepd. in 62% yield from IV like VIII. III (0.21 g.)
 and 0.15 g. 1-ethyl-3-nitroso-2-phenylindole (XI) in 10 cc. hot Ac₂O
 treated with 0.2 cc. Et₃N and boiled 15 min. and the resulting soln.
 cooled gave 0.2 g. cyanine sulfonate monohydrate, scarlet needles, m.
 255-7° (from IX). I (0.65 g.) and 0.55 g. XI added to NaOMe soln.
 (from 20 mg. Na and 25 cc. MeOH), the mixt. boiled 5 hrs., cooled, the
 cryst. ppt. collected, extd. with boiling MeOH (ext. A), and the
 undissolved residue (78 mg.) crystd. from IX gave β -azadimethine-2-[1-
 methyl- ψ -indolo (3',2'-3,4) quinoline] -3''[1''-ethyl-2''-
 phenylindole] (XII), orange needles, m. 295-7° (decompn.); ext. A
 yielded 0.15 g. β -azadimethine-2-[indolo(3',2'-3,4)quinoline]-3''-
 [1''-ethyl-2''-phenylindole] (XIII), yellow crystals, m. 261-4°
 (from MeOH); the infrared spectrum of XIII had a band at 2.95 μ but
 otherwise the spectra of XII and XIII were closely similar, both having
 strong bands at 6.17 and 6.18 μ , resp. IV (0.7 g.) and 0.5 g. XI in 25
 cc. EtOH and 0.25 cc. VI treated similarly gave 0.65 g. of the
 1,1'-dimethylindocyanine sulfonate, deep red prisms, m. 254-5°
 (from EtOH). The absorption and sensitizing properties of certain of the
 above compds. are recorded.

IT 4295-28-7, 11H-Indolo[3,2-c]quinoline, 6-methyl-
 109697-99-6, 11H-Indolo[3,2-c]quinoline, 6,11-dimethyl-
 (cyanine dyes from)
 RN 4295-28-7 CAPLUS
 CN 11H-Indolo[3,2-c]quinoline, 6-methyl- (7CI, 8CI, 9CI) (CA INDEX NAME)

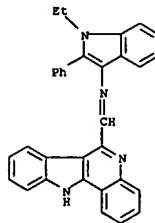


RN 109697-99-6 CAPLUS
 CN 11H-Indolo[3,2-c]quinoline, 6,11-dimethyl- (6CI) (CA INDEX NAME)

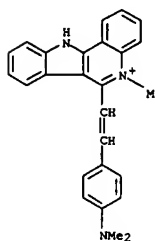


IT 124290-49-9, 11H-Indolo[3,2-c]quinoline, 6-[N-(1-ethyl-2-

L7 ANSWER 254 OF 273 CAPLUS COPYRIGHT 2005 ACS ON STN (Continued)
 phenylindol-3-yl)formimidoyl]- 860382-42-9, Dimethinecyanine
 p-toluenesulfonate, [1-methylindolo(3':2'-3:4)-2-quinoline][p-
 dimethylaminobenzene]-
 (prepn. of)
 RN 124290-49-9 CAPLUS
 CN 11H-Indolo[3,2-c]quinoline,
 6-[N-(1-ethyl-2-phenylindol-3-yl)formimidoyl]-
 (6CI) (CA INDEX NAME)



RN 860382-42-9 CAPLUS
 CN Dimethinecyanine p-toluenesulfonate, [1-methylindolo(3':2'-3:4)-2-
 quinoline][p-dimethylaminobenzene]- (6CI) (CA INDEX NAME)



L7 ANSWER 255 OF 273 CAPLUS COPYRIGHT 2005 ACS ON STN (Continued)
 AN 1957:1803 CAPLUS
 DN 51:1803
 OREF 51:399b-1,400a-1,401a-e
 TI Action of acyl cyanides on 2- and 1,2-substituted indoles. II.
 Derivatives
 of 2-o-aminophenylindole
 AU Kiang, A. K.; Mann, F. G.; Prior, A. F.; Topham, A.
 CS Univ. Cambridge, UK
 SO Journal of the Chemical Society, Abstracts (1956) 1319-31
 CODEN JCSAAZ; ISSN: 0590-9791
 DT Journal
 LA Unavailable
 GI For diagram(s), see printed CA issue.
 AB cf. C.A. 48, 6429h. MeCN reacted with 2-o-aminophenylindole (I) to give
 the acetamidindole (II), 2-methylindolo[3',2',3,4]quinoline (III), and
 the isomeric 2-methylindolo[1',2',3,4]quinazoline (IV) under various
 conditions. BzCN (V) similarly gave the benzamidoindole (VI) and the
 2-phenylindoloquinoline (VII). The interrelation of these compds. was
 discussed. MeCN and V with 2-o-aminophenyl-1-methylindole (VIII) gave

the corresponding acylaminoindoles and indoloquinolines. PC15 (138 g.) added
 gradually with shaking to 102 g. o-o2NC6H4CO₂H, and the mixture heated 20
 min. on a boiling H₂O-bath gave 108 g. o-o2NC6H4COCl. CH₂(CO₂Et)₂ (103
 g.) heated simultaneously at 5° with NaOEt (from 27.8 g. Na) in
 EtOH and 73 cc. of the acid chloride in Et₂O, after 10 min. the mixture
 added to 25 cc. concentrated H₂SO₄ in 500 cc. H₂O, and the residual Et
 o-nitrobenzylmalonate refluxed 4 hrs. with 270 cc. H₂SO₄ in 925 cc. H₂O
 and the residue heated at 100°/15 mm. gave 74 g. o-o2NC6H4CO₂Me
 (IX). IX (68 g.) and 350 cc. concentrated HCl treated 1 hr. at 95° with
 153 g. Sn, stirred 0.5 hr. longer, treated with 470 cc. 30% NaOH in the
 hot yielded 42 g. o-HZNC6H4CO₂Me; phenylhydrazine (X), m. 104-8°. X
 (50 g.) and 250 g. ZnCl₂ kept at bath temperature 160° for 10 min. while
 the internal temperature rose to 210°, dilute HCl added, and the mixture
 heated 1 hr. longer, and the solution treated with NH₄OH gave 38.5 g. I,
 m.

154-6° (from alc.), sublimed unchanged at 145°/0.001 mm.
 The use of EtOH-HCl or lower proportion of ZnCl₂ gave lower yields. I (3
 g.) left 1 hr. with 6 cc. Ac₂O produced 2.75 g. II, m. 156-7° (from
 alc.). Carrying this preparation out on a large scale without strong
 cooling
 caused II to be contaminated with IV. BzCl (0.6 cc.) and 1.04 g. I in 2
 cc. C₅H₅N heated to 50° yielded 1.1 g. VI, needles, m.
 175-5.5°. Pure I in an excess of 10% aqueous NaOH shaken with excess
 BzCl gave a benzamido compound (XI), m. 166°, which depressed the
 m.p. of VI to 148-60° on admixture. PhCH₂COCl (1.32 cc.), 2 g. I,
 and 2 cc. C₅H₅N gave 1.2 g. 2-o-phenylacetamidophenylindole (XII), m.
 169-70° (from alc.). I (1 g.) in 10 cc. chilled HCO₂H evaporated at
 room temperature yielded 0.9 g. indolo[1',2',3,4]quinazoline (XIII),
 yellow

crystals, m. 200-1°. XIII was also obtained from 1 g. I refluxed
 10 min. in 5 cc. HCO₂H or in HCONH₂. I was unaffected when refluxed in
 HCO₂Et. I (2 g.) in Ac₂O refluxed 2 hrs. gave IV, m. 114-16° (from
 alc.). AcCl (0.5 cc.) treated vigorously with 1 g. I in 20 cc. CHCl₃

gave
 1.4 g. IV hydrochloride (XIV) which with NH₃ gave 0.84 g. IV. II (1 g.)
 refluxed 2 hrs. in AcOH with concentrated HCl yielded XIV which
 0.88 g. IV.
 II was also readily converted into XIV when heated in CHCl₃HCl, EtOH-HCl,
 or suspended in excess dilute HCl. I (2.1 g.) and 1.15 cc. BzCl
 refluxed 3

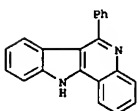
L7 ANSWER 255 OF 273 CAPLUS COPYRIGHT 2005 ACS ON STN (Continued)
 hrs. in CHCl₃ yielded 2.7 g. 2-phenylindoloquinazoline (XV), m.
 197-8° (from alc.). Alternatively with dry HCl passage for 3 hrs.
 at 60° the yield of XV was 1.23 g. VI (0.1 g.) refluxed 3 hrs. with
 Et-HCl gave crude hydrochloride which was dissociated to XV. XI
 similarly
 treated also yielded XV. XI thus had the structure o-C₆H₄.CH:C(C₆H₄NH₂-
 o).NBz. PhCH₂COCl (1.33 g.) and 2.1 g. I refluxed 75 min. in CHCl₃ and
 the hydrochloride (2.4 g., m. 254°) yielded 2-
 benzylindoloquinazoline (XVI), m. 194-7°. XII with EtOH-HCl
 yielded XVI. Et anthranilate and PhCMe(OEt)₂ condensed to
 4-hydroxy-2-phenylquinoline which was converted into 4-chloro-2-
 phenylquinoline (XVII). XVII (2.4 g.), 1.1 g. o-phenylenediamine, 0.05

g.
 Cu powder, and 0.1 cc. concd. HCl heated at 18 mm. (reaction started at
 120° and became vigorous at 130°), kept at 130° until
 the reaction ceased, and increased to 140° for 5 min., yielded
 4-o-aminophenyl-2-phenylquinoline (XVIII), yellow crystals, m.
 179-81° (from alc.). XVIII in alc. mixed at 5-10° with N
 HCl and treated with MeNO gave 4-(1-benzotriazolyl)-2-phenylquinoline
 (XIX); HCl salt, m. 185-6°. XIX (1 g.) heated at 140-50° in
 10 cc. sirupy H₃PO₄ until evolution of N ceased, then 1 min. at
 150° yielded VII, m. 245-6° (from C₆H₆); HCl salt-H₂O, m.
 326-44°. AcCH₂CO₂Et (127 cc.) and 23 g. Na in alc. treated at
 0-5° with 53 cc. PhCH₂COCl, 9.2 g. Na in alc., and 32 cc. of the
 chloride, the mixt. treated with 76 cc. HCl in H₂O, made alk. to Congo

red
 with 30% NaOH, and after 15 min. a buffered CuSO₄ soln. added gave 130 g.
 of the Cu deriv. of Et γ -phenylacetate (XX), m.
 177-8°. XX (134 g.), 400 cc. Et₂O, 60 cc. HCl, and ice stirred
 several hrs. at 0-5° gave 115.5 g. of a residual ester, which was
 treated with 832 cc. 0.85N EtOH-NH₃, and the residue treated with 2.5%
 Cu(OAc)₂ in 50% aq. MeOH to yield 60 g. Cu complex of Et
 γ -phenylacetate (XXI), m. 125.0-5.5°. XXI (69.5 g.)
 with HCl and Et₂O gave 59.5 g. of crude Et γ -phenylacetate
 (XXII) as a colorless oil. The above conditions must be closely followed
 for satisfactory yields of XX and XXII. XXII (20.6 g.), 10 cc. PhNH₂, 25
 cc. C₆H₆, and 0.25 cc. AcOH refluxed 4 hrs. at 125° with H₂O being
 azeotropically removed gave 22.2 g. Et β -anilino- γ -
 phenylcrotonate (XXIII), m. 95.0-5.5°. XXIII (30 g.) added during
 2 min. to "Dowtherm" at 240°, then refluxed 10 min. yielded 25.5 g.
 2-benzyl-4-hydroxyquinoline (XXIV), m. 209-10°, increased to
 210° (from BuOH). XXIV (29.5 g.) and 59 cc. POCl₃ heated at
 100° and excess chloride removed in vacuo yielded
 2-benzyl-4-chloroquinoline (XXV), m. 49-51°. XXV (5 g.) and 5 g.
 o-C₆H₄(NH₂)₂ heated 3 hrs. at 140°/25 mm. gave 5.2 g. HCl salt of
 4-o-aminophenyl-2-benzylquinoline (XXVI), m. 350° (from 50% aq.
 AcOH). A 25% soln. of NaNO₂ added at 0-5° to 6.5 g. XXVI in 2N HCl
 and AcOH yielded 4-(1-benzotriazolyl)-2-benzylquinoline (XXVII). XXVII
 heated 10 min. at 170° with H₃PO₄ then stirred 2 hrs. with 30% aq.
 NaOH gave 2-benzylindolo[3',2',3,4]quinoline, m. 215-17° (from
 MeOH). MeCN (0.72 cc.) set aside overnight with 1 g. I in 25 cc. CHCl₃
 gave 1 g. II. When the mixt. was refluxed 1 hr. and evapd. it yielded
 0.82 g. II. The mixt. dild. with 20 cc. satd. soln. dry HCl-CHCl₃ and
 left 48 hrs. yielded 0.23 g. III, m. 291-3° (from MeOH). The CHCl₃
 filtrate upon evapn. and treatment in EtOH with NH₃ gave 0.88 g. II. Two
 repetitions of this expt. in which CHCl₃-HCl added was 10 and 5 cc. gave
 0.16 g. and 0.08 g. III and 1.05 and 1.1 g. II. I (1 g.) and 0.72 cc.
 MeCN in CHCl₃ heated at 50° while dry HCl was passed through for 15
 min. to yield 0.21 g. crude III. The C₆H₆ filtrate gave IV. These
 isomers are easily sepd. because the former is almost insol. in C₆H₆,
 sol.

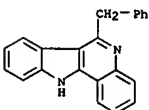
L7 ANSWER 255 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)
 in cold EtOH, and only moderately sol. in cold MeOH, whereas IV is readily sol. in hot C6H6 and only moderately sol. in cold EtOH. Addn. of AlCl₃ or SnCl₄ to the above mixt. appeared to increase the yield of III. V (0.6 g.) heated 4 hrs. at 60° with 0.5 g. I in 7.5 cc. CHCl₃ gave VI, m. 173-5°. I (0.5 g.) and 0.89 g. V refluxed 2 hrs. with CHCl₃ contg. 0.2 cc. C₅H₅N gave VI. V (1.3 g.) heated at 60° with 1.04 g. I in CHCl₃ when dry HCl was passed in for 4 hrs. and the ppt. (1.55 g.) heated with dil. HCl gave 0.75 g. VII, which may be dimorphic, m. 202-3° (from C₆H₆), which sublimed at 240°/0.005 mm. to give a m.p. of 243-4°. K (4 g.) in 10 cc. tert-BuOH and 1.72 g. Me benzenesulfonate added to 2.1 g. I in tert-BuOH, and refluxed 10 min. gave 90% VIII, m. 129° (from alc.); use of Me p-toluenesulfonate also gave excellent results. VIII was more sol. in CHCl₃ than I. o-H₂N₂C₆H₄COMe (5 g.), 4.85 g. N-methyl-N-phenylhydrazine, alc., and AcOH refluxed 6 hrs. gave the methylphenylhydrazine as yellow needles, m. 76.5-7.0°. The Fischer cyclization using ZnCl₂ gave VIII; when EtOH-HCl was used, VIII was not obtained. VIII (1 g.) in 8 cc. HCO₂H at 0° evapd. to dryness gave the 2-o-formamido compd. (XXVIII), m. 99-100°, which sublimed unchanged at 0.001 mm. VIII with Ac₂O gave the 2-o-acetamido compd. (XXIX), m. 96-7° (from 50% EtOH). Crude XXIX unless carefully crystd. may undergo cyclization. VIII in 10% NaOH shaken with BzCl gave 2-o-benzamido compd. (XXX), m. 133-4°. XXVIII, XXIX, and XXX in alc. gave no ppt. with cold alc. 2,4-dinitrophenylhydrazine contg. HCl; warming the solns. readily caused cyclization. VIII (0.5 g.) in 3 cc. 85% HCO₂H refluxed 2 hrs. gave 1'-methylindolo[3',2',3,4]quinoline (XXXI), purified by sublimation at 150°/0.001 mm., m. 146°. Similar treatment of XXVIII also gave XXXI. When an alc. soln. of XXVIII contg. a trace of HCl was refluxed 15 min. hydrolysis occurred and VIII was recovered. XXIX similarly treated in AcOH, HCO₂H, and HCl gave the hydrochloride of the 1',2-dimethylindoloquinoline which on basification gave the base (XXXII), needles, m. 179-80° (from EtOAc). Likewise XXX in EtOH-HCl gave 1'-methyl-2-phenylindolo[3',2',3,4]-quinoline (XXXIII), m. 188°. o-Acetamidoacetophenone N-methyl-N-phenylhydrazine (m. 131-2°) (8 g.) refluxed 7 hrs. in EtOH-HCl gave 23% XXXII after basification of the hydrochloride. XXXII.HCl m. 358-60° (decompn.). o-Benzamidoacetophenone N-methyl-N-phenylhydrazine prepd. in 71% yield, m. 126° (from alc.), cyclized by EtOH-HCl gave XXXIII. The hydrated hydrochloride of XXXIII readily recrystd. from dil. HCl but attempts at dehydration always caused disoccn. XXXIII in CHCl₃ treated with dry HCl gave the anhydrous hydrochloride, m. 288-92° (decompn.) (from HCONMe₂). MeCN (0.15 cc.) added to a soln. of 0.44 g. VIII in CHCl₃ contg. C₅H₅N left overnight yielded XXIX. A repetition of the expt. using C₅H₅N alone as solvent gave the same product. This mixt. without addn. of C₅H₅N deposited crystals of the acetate of XXXII, m. 338-40°, which treated with NH₃ gave free XXXII. HCl passed 2-3 min. through the above mixt. of cyanide and VIII in CHCl₃ deposited XXXII.HCl in almost theoretical yield. When HCl was passed through the mixt. for 1 hr. the soln. deposited an intractable tar. C₅H₅N added to a soln. of 0.44 g. VIII and 0.8 g. V in CHCl₃ refluxed 2 hrs. and evapd. gave XXX. VIII

L7 ANSWER 255 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)
 RN 110423-28-4 CAPLUS
 CN 11H-Indolo[3,2-c]quinoline, 6-phenyl-, hydrochloride (6CI) (CA INDEX NAME)

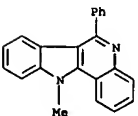


● HCl

RN 112274-44-9 CAPLUS
 CN 11H-Indolo[3,2-c]quinoline, 6-benzyl- (6CI) (CA INDEX NAME)



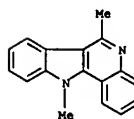
RN 112274-45-0 CAPLUS
 CN 11H-Indolo[3,2-c]quinoline, 11-methyl-6-phenyl-, hydrochloride (6CI) (CA INDEX NAME)



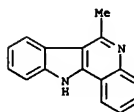
● HCl

RN 112274-46-1 CAPLUS
 CN 11H-Indolo[3,2-c]quinoline, 11-methyl-6-phenyl- (6CI) (CA INDEX NAME)

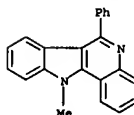
L7 ANSWER 255 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)
 (0.44 g.) and 1.1 mole (0.3 g.) V in C₅H₅N refluxed 1 hr. gave XXX. Repetition of this expt. using 0.8 g. V with refluxing for 2 hrs. gave the same result. VIII and V set aside 2 days in CHCl₃ gave 0.5 g. XXX. A similar mixt. refluxed 1 hr. gave the same result. HCl passed for 5 min. through a soln. of VIII and V in CHCl₃ gave the HCl salt of XXXIII. Decompn. of the product with NH₃ gave XXXIII. Repetition of this expt. in which the mixt. was set aside 48 hrs. gave the same result. In all the above expts. it was essential to use freshly prepd. V. VI, m. 176°, in a Nujol mull showed strong bands at 5.98 and 2.98 μ (:CO) and (:NH) groups, with weaker bands at 6.17 and 6.32 μ (amide group); in CCl₄ strong :CO band at 5.90 μ and a weak band at 5.98 μ, and a weak band at 2.88 μ due to the :NH group. These values are closely similar to phenylbenzamide. XI in the mull showed 3 strong bands at 5.89 and 5.95, and at 2.96 μ, and in soln. a strong band at 5.89 and 2.93 μ. XXX in mull showed strong bands at 6.00, 6.07, and 3.05 μ, weak and strong band at 6.19 and 6.33 μ; in CCl₄ strong bands at 5.91 and 2.94 μ, in hexachlorobutadiene a strong band at 3.05 μ. IT 109697-99-6, 11H-Indolo[3,2-c]quinoline, 6,11-dimethyl- (and salts)
 RN 109697-99-6 CAPLUS
 CN 11H-Indolo[3,2-c]quinoline, 6,11-dimethyl- (6CI) (CA INDEX NAME)



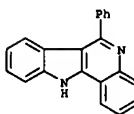
IT 4295-28-7, 11H-Indolo[3,2-c]quinoline, 6-methyl-110423-28-4, 11H-Indolo[3,2-c]quinoline, 6-phenyl-, hydrochloride 112274-44-9, 11H-Indolo[3,2-c]quinoline, 6-benzyl-112274-45-0, 11H-Indolo[3,2-c]quinoline, 11-methyl-6-phenyl-, hydrochloride 112274-46-1, 11H-Indolo[3,2-c]quinoline, 11-methyl-6-phenyl- 228576-01-0, 11H-Indolo[3,2-c]quinoline, 6-phenyl- 856784-16-2, 11H-Indolo[3,2-c]quinoline, 11-methyl- (preparation of)
 RN 4295-28-7 CAPLUS
 CN 11H-Indolo[3,2-c]quinoline, 6-methyl- (7CI, 8CI, 9CI) (CA INDEX NAME)



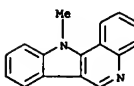
L7 ANSWER 255 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



RN 228576-01-0 CAPLUS
 CN 11H-Indolo[3,2-c]quinoline, 6-phenyl- (9CI) (CA INDEX NAME)

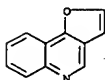


RN 856784-16-2 CAPLUS
 CN 11H-Indolo[3,2-c]quinoline, 11-methyl- (6CI) (CA INDEX NAME)

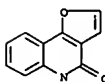


L7 ANSWER 256 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)
 AN 1956:56917 CAPLUS
 DN 50:56917
 OREF 50:10721d-1,10722a-g
 TI Synthesis of furano [3',2',3,4]quinolines and the structure of dictamninc acid
 AU Grondon, M. F.; McCorkindale, N. J.; Rodger, M. N.
 CS Univ. Glasgow, UK
 SO Journal of the Chemical Society, Abstracts (1955) 4284-90
 CODEN: JCSAAZ; ISSN: 0590-9791
 DT Journal
 LA Unavailable
 OS CASREACT 50:56917
 AB cf. C.A. 25,297. EtOCH₂CH₂CH(CO₂Et)₂ (I) (prepared in 70% yield, b_D 6-0.8
 84-94°, n_D 1.4284) (20 g.), 7.3 g. PhNH₂, and 250 cc. Ph₂O were refluxed 6 hrs. (12 cc. EtOH collected in 4.5 hrs.), and the whole cooled and diluted with 1 l. petr. ether gave 13.2 g. yellow solid (II), which, recrystd. from C₅H₅N, gave 9.41 g. 1,2,4',5'-tetrahydro-2-oxofurano[3',2',3,4]quinoline (III), m. 280-1° (decomposition). III was insol. in 2N aqueous NaOH, was recovered unchanged after refluxing with EtOH-KOH or concentrated HCl, and gave a faint yellow color with FeCl₃ in EtOH.
 III (0.5 g.) and 5 cc. POCl₃ refluxed 1.5 hrs., the whole concentrated in vacuo, the residue treated with H₂O, the solid extracted with 100 cc. Et₂O, and the Et₂O evaporated gave 0.12 g. 2,4-dichloro-3-(2-chloroethyl)quinoline, colorless rectangular plates, m. 112-14°. III (8 g.), 6 g. 10% Pd-C, and 50 cc. Ph₂O refluxed 14 hrs., the whole cooled, diluted with petr. ether, the precipitated solid extracted with boiling EtOH and the EtOH exts. concentrated gave 4.6 g. 1,2-dihydro-2-oxofurano[3',2',3,4]quinoline (IV), colorless prisms, m. 249-50° (from EtOH). In similar fashion, 2.41 g. o-MeOC₆H₄NH₂ and 5 g. I in 7 cc. Ph₂O kept 3 hrs. at 260° (3 moles EtOH collected) gave the 8-MeO derivative (V) of III, yellow prisms, m. 219-20° (from C₅H₅N); when the reaction was repeated except that only 2 moles EtOH were collected when the refluxing was terminated, there was obtained 10% 3-(2-ethoxyethyl)-2,4-dihydroxy-8-methoxyquinoline (VI), colorless prisms, m. 130-1° (from EtOAc). VI was soluble in 2N aqueous NaOH and gave a faint red color with FeCl₃ in EtOH. As above, 2 g. V, 0.8 g. 10% Pd-C, and 20 cc. Ph₂O gave 33% 8-MeO derivative (VII) of IV, yellow prisms, m. 201-3° (from EtOH). IV (2.25 g.) and 14 cc. POCl₃ refluxed 1 hr. and the product isolated as above gave 1.25 g. 2-chlorofurano[3',2',3,4]quinoline (VIII), colorless crystals, m. 118° (from EtOH). VIII (0.01 g.) in 2 cc. MeOH and 0.01 g. Na in 2 cc. MeOH were refluxed 1 hr., the whole concentrated, diluted with H₂O, extracted with CHCl₃, the CHCl₃ exts. concentrated, the residual oil extracted with petr. ether, and the petr. ether exts. concentrated gave 0.04 g. 2-methoxyfurano[3',2',3,4]quinoline (IX), white needles, m. 52-3° (from aqueous EtOH). III (0.25 g.) in 10 cc. MeOH and 0.4 cc. Me₂SO₄ in 1 cc.

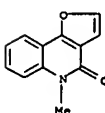
L7 ANSWER 256 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)
 proposed structure for dictamninc acid (C.A. 25,297). The infrared spectra of these compds. showed that 2-quinolones have strong absorption at 2700-2850 A. which in the 4-quinolones is either absent or appears as a shoulder.
 IT 234-07-1, Furo[3,2-c]quinoline (and derivs.)
 RN 234-07-1 CAPLUS
 CN Furo[3,2-c]quinoline (8CI, 9CI) (CA INDEX NAME)



IT 35136-12-0, Furo[3,2-c]quinolin-4(5H)-one 67735-57-3, Furo[3,2-c]quinolin-4(5H)-one, 5-methyl- 120208-89-1, Furo[3,2-c]quinoline, 4-methoxy- 627086-17-3, Furo[3,2-c]quinoline, 4-chloro- 640721-92-2, Furo[3,2-c]quinolin-4(5H)-one, 6-methoxy- 858250-16-5, Furo[3,2-c]quinoline, 4-hydrazino- (preparation of)
 RN 35136-12-0 CAPLUS
 CN Furo[3,2-c]quinolin-4(5H)-one (6CI, 9CI) (CA INDEX NAME)

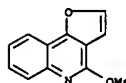


RN 67735-57-3 CAPLUS
 CN Furo[3,2-c]quinolin-4(5H)-one, 5-methyl- (6CI, 9CI) (CA INDEX NAME)

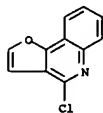


RN 120208-89-1 CAPLUS
 CN Furo[3,2-c]quinoline, 4-methoxy- (6CI) (CA INDEX NAME)

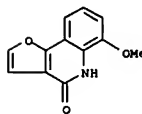
L7 ANSWER 256 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)
 20% MeOH-KOH were shaken 15 min., the whole was dild. with H₂O, 2 addnl. portions as above of Me₂SO₄ and MeOH-KOH added at 15 min. intervals, the MeOH evapd., and the residual red oil dissolved in C₆H₆ and chromatographed on alumina; elution with C₆H₆ and concn. of the eluates gave 34% 8-MeO deriv., colorless needles, m. 129-30° (from petr. ether). VIII (0.5 g.), 0.4 cc. 90% H₂NNH₂·H₂O and 3 cc. EtOH refluxed 3 hrs., the whole evapd. to dryness in vacuo and the residue treated with H₂O gave 0.49 g. of presumably the 2-hydrazino analog (X), m. 120°; X, 20 cc. H₂O, and 20 cc. 10% aq. CuSO₄ soln. were refluxed 1 hr., the whole made alk., extd. with CHCl₃, and the CHCl₃ exts. concd. and distd. gave 0.25 g. furano[3',2',3,4]quinoline (XI), pale yellow oil, b_D 6 130-40° (bath temp.), colorless needles, m. 36-7° (from petr. ether). VIII (0.5 g.), 6.7 g. Zn dust, 10 cc. EtOH, and 10 cc. 2N H₂SO₄ shaken 2 hrs., the whole extd. with Et₂O, and the aq. layer made alk. and worked up as above gave 6% XI. KMnO₄ (1.5 g.) in 54 cc. Me₂CO was added in 1.5 hrs. to 0.674 g. XI in 10 cc. Me₂CO, the whole dild. with H₂O, treated with SO₂, the Me₂CO removed, and the residual soln. treated with an excess of NaHCO₃, extd. with CHCl₃ and the aq. layer acidified gave 17% 3-carboxy-4-quinolone, colorless needles, m. 269-70° (decompn.) (from EtOH). o-H₂NC₆H₄CO₂Me (60 g.) and 330 g. CH₂(CO₂Et)₂ (XII) heated 3 hrs. at 195° (1 mole EtOH collected), excess XII removed, the residue in 300 cc. refluxing Et₂O was treated dropwise with 10 g. Na in 180 cc. EtOH, the whole kept 12 hrs. at room temp., the solid filtered off and dissolved in H₂O and the aq. soln. acidified with HCl gave 57.5 g. 3-ethoxycarbonyl-2,4-dihydroxyquinoline (XIII), colorless needles, m. 208°; 3 g. XIII in 25 cc. Et₂O and excess CH₂N₂ gave the 4-Me ether (XIV), colorless plates, m. 144° (from aq. MeOH). XIII (1 g.) and 12 cc. POCl₃ refluxed 1.5 hrs., the whole concd. in vacuo and the residue treated with H₂O gave 1.1 g. 2,4-dichloro-3-ethoxycarbonylquinoline (XV), colorless rectangular plates, m. 103-4° (from aq. EtOH). XIV (2 g.) and 10 cc. POCl₃ refluxed 20 min., concd. in vacuo, 50 ml. H₂O added, the whole extd. with Et₂O, the Et₂O exts. washed with aq. Na₂CO₃ and H₂O, dried, and concd., and the residue triturated with 10 ml. Et₂O gave 0.22 g. recovered XIV; the Et₂O mother liquors were concd. and the residue dissolved in 10 ml. EtOH and cooled gave 0.47 g. XV; evapn. of the EtOH mother liquors and distn. of the residue (0.96 g.) gave crude 2-chloro-3-ethoxycarbonyl-4-methoxyquinoline (XVI), colorless oil, b_D 2 170-5° (bath temp.), contaminated with some XV. XVI (0.4 g.), 10 cc. MeOH, 10 cc. 15% aq. KOH refluxed 10 min., the whole concd. in vacuo and the residue acidified with HCl gave 0.09 g. 3-carboxy-2-chloro-4-methoxyquinoline (XVII), colorless plates, m. 173-5° (decompn.) (from MeOH), sol. in aq. NaHCO₃ and gave no color with FeCl₃ in aq. EtOH. XVII (0.075 g.) in 5 cc. 15% aq. KOH heated 0.5 hr. on the steam bath, and acidified gave 0.55 g. 3-carboxy-2-chloro-4-quinolone (XVIII), m. 194-5° (from MeOH), gave a red brown color with FeCl₃ in aq. EtOH. XVIII (0.09 g.), 0.5 cc. 90% H₂NNH₂·H₂O, and 20 cc. EtOH refluxed 2 hrs. gave 0.08 g. 3-carboxy-2-hydrazino-4-quinolone (XIX), colorless needles, m. 224° (decompn.) (from AcOH). XIX (0.08 g.) in 10 cc. boiling H₂O and 2 cc. 10% aq. CuSO₄ refluxed 1 hr., 5 cc. 2N NaOH added, the whole refluxed 0.25 hr. and filtered, and the filtrate acidified gave 0.06 g. 3-carboxyquinolone, m. 264-6° (decompn.) (from EtOH or AcOH). This then confirms the



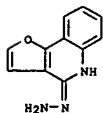
RN 627086-17-3 CAPLUS
 CN Furo[3,2-c]quinoline, 4-chloro- (9CI) (CA INDEX NAME)



RN 640721-92-2 CAPLUS
 CN Furo[3,2-c]quinolin-4(5H)-one, 6-methoxy- (5CI) (CA INDEX NAME)

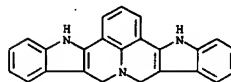


RN 858250-16-5 CAPLUS
 CN Furo[3,2-c]quinoline, 4-hydrazino- (5CI) (CA INDEX NAME)

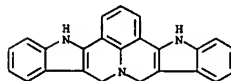


L7 ANSWER 257 OF 273 CAPLUS COPYRIGHT 2005 ACS ON STN
 AN 1956:4763 CAPLUS
 DN 50:4763
 GREF 50:10061,1007a-g
 TI Structure and properties of certain polycyclic indole and quinolino derivatives. VII. Derivatives of 1,6-dioxajulolidine
 AU Brauholtz, John T.; Mann, Frederick G.
 CS Univ. Cambridge, UK
 SO Journal of the Chemical Society, Abstracts (1955) 393-8
 CODEN: JCSAAZ; ISSN: 0590-9791
 DT Journal
 LA Unavailable
 GI For diagram(s), see printed CA Issue.
 AB The bis(phenyl- (I) and bis(diphenylhydrazones) (II) of 1,6-dioxajulolidine (III) undergo the Fischer indolization to furnish the corresponding diindolo(2',3',1,2) (3'',2'',5,6)juloline(IV) and the 1',1'-di-Ph derivative (V). IV was stable only as its salts. w-Indole formation was not noted in this series. III submitted to the Pfitzinger reaction with isatin gave the purple diquinolino(2',3',1,2) (3'',2'',5,6)juloline-4',4''-dicarboxylic acid (VI), which on heating undergoes the allylic rearrangement to the orange isojuloline derivative (VII). VII on decarboxylation gave the orange diquinolinojuloline (VIII), which on heating with HCl underwent the same rearrangement with formation of the isomeric red isojuloline derivative (IX); sublimation reconverted IX into VIII. I (1 g.) in 40 cc. saturated EtOH-HCl refluxed 5 hrs. and set aside overnight yielded 0.6 g. (57%) IV.HCl, orange, m. 346° (decomposition). A solution of the HCl salt with NaI gave IV.HI, m. 400°; thiocyanate, powder, m. 318° (decomposition); monpicrate, m. 253° (decomposition). IV.HCl in hot MeOH treated with excess 10% NaOH yielded IV, yellow solid, which was very unstable. IV recrystd. from Me2CO-EtOH as yellow platelets which also contained decomposition product. II similarly treated yielded V.HCl, orange crystals, m. 260° (decomposition). Alkaline treatment of this salt gave V as an amorphous powder, m. 170° (decomposition). V was also quite unstable to heat. III (2 g.) refluxed 20 hrs. with 3 g. isatin and 3.6 g. KOH in 25 cc. MeOH and 5 cc. H2O yielded 4 g. (87%) VI, m. 363° (decomposition), hygroscopic and forming in air the stable tetrahydrate. VI in warm aqueous NaOH or Na2CO3 formed the orange Na salt, too deliquescent for isolation; acidification gave VI again. The ultraviolet absorption of VI in 10% aqueous NaOH was: λ_{maximum} 390-393 (e 10950), 256 (e 46600), 229-231 m μ (e 58900), λ_{min} 356 (e 7050), 252 (e 40800), 224 (e 56000). VI, was cautiously heated at 300-20°/0.1 mm. until conversion into the orange acid VII was complete, m. 363° (decomposition), λ_{maximum} 424-428 m μ , λ_{min} 412-14 m μ , λ_{inf} 438-456 and 376-388 m μ (in 10% NaOH). VII exposed to the air 12 hrs. turned brown; this change was reversed by heating gently in vacuo. VI heated gently at 15 mm. and then at 350°/0.1 mm. gave 50% VIII, lustrous orange needles, m. 319.5° (decomposition), sharp peak at 6.23 μ , flanked by weaker bands at 6.15 and 6.33 μ , and a strong

L7 ANSWER 257 OF 273 CAPLUS COPYRIGHT 2005 ACS ON STN (Continued)
 band at 13.55 μ ; the unstable HCl salt, initially bluish-purple, became red, and then yellow, on washing. VIII refluxed 4 hrs. in concd. HCl and the product treated with aq. NaOH yielded, almost quantitatively, IX, deep red needles, m. 319°, bands at 6.07, 6.15, and 6.25 μ (strength, 6.07 < 6.25 < 6.15) and a strong-broad-based band at 13.38 μ , accompanied by weaker ones at 13.1 and 13.8 μ . IX (150 mg.), sublimed at 280-300°/0.1 mm., yielded 140-50 mg. VIII.
 IT 4393-82-2, Benzo[i]diindolo[2,3-b,3',2'-g]quinolizine, 4,9,11,16-tetrahydro- (and derivs.)
 RN 4393-82-2 CAPLUS
 CN Benzo[i]diindolo[2,3-b:3',2'-g]quinolizine, 4,9,11,16-tetrahydro- (8Cl, 9Cl) (CA INDEX NAME)



IT 859490-85-0, Thiocyanic acid, compound with 4,9,11,16-tetrahydrobenzo[i]diindolo[2,3-b,3',2'-g]quinolizine (preparation of)
 RN 859490-85-0 CAPLUS
 CN Thiocyanic acid, compd. with 4,9,11,16-tetrahydrobenzo[i]diindolo[2,3-b,3',2'-g]quinolizine (5Cl) (CA INDEX NAME)
 CM 1
 CRN 4393-82-2
 CMF C24 H17 N3



CM 2
 CRN 463-56-9
 CMF C H N S

HS-C≡N

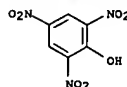
L7 ANSWER 257 OF 273 CAPLUS COPYRIGHT 2005 ACS ON STN (Continued)

L7 ANSWER 258 OF 273 CAPLUS COPYRIGHT 2005 ACS ON STN
 AN 1956:4762 CAPLUS
 DN 50:4762
 GREF 50:1005k-1,1006a-i
 TI Structure and properties of certain polycyclic indole and quinolino derivatives. VI. Derivatives of 1,2,3,4-tetrahydro-1-methyl-4-oxoquinoline
 AU Brauholtz, John T.; Mann, Frederick G.
 CS Univ. Cambridge, UK
 SO Journal of the Chemical Society, Abstracts (1955) 381-92
 CODEN: JCSAAZ; ISSN: 0590-9791
 DT Journal
 LA Unavailable
 AB cf. C.A. 47, 1123e. The phenylhydrazone (I) of 1,2,3,4-tetrahydro-1-methyl-4-oxoquinoline (II) in EtOH refluxed 5.5 h. with 35 cc. EtOH saturated with HCl, and the solution set aside at 5° overnight, then basified, yielded 1-methyl-w-indolo(3',2',3,4)quinoline (III), lemon-yellow crystals, m. 193.5-4.0°, sublimed at 210-30°/0.1 mm.; picrate, needles, m. 325° (decomposition). III holds H2O, presumably with formation of the hydroxide (IV). IV immersed at 50°, m. 105-25°, resolidified at 125-50°, and remelted at 195°. The precipitate, crystallized from EtOH before basification, gave the HCl salt hemihydrate, needles, m. 297°. III refluxed 0.5 h. in MeOH with MeI gave the methiodide (V), needles, m. 315-20°; ethiodide (as a MeOH solvate), plates, m. 298° (effervescence); ethopicrate, yellow crystals, m. 200-60°. Crude II (3 g.) gave a diphenylhydrazone (VI), yellow crystals, m. 112-13°. VI indolized as described above gave 1,2-dihydro-1-methyl-1'-phenylindolo(3',2',3,4)quinoline (VII), plates, m. 152-3°. VII slowly heated in a open tube m. 210-15° with formation of 1,2-dihydro-1-methyl-2-oxo-1'-phenylindolo(3',2',3,4)quinoline (VIII). All attempts to form the HCl salt failed, but VII gave a picrate, orange needles, m. 208.5-9.0°; methiodide (by refluxing 2 h. under N with MeNO2 and MeI), needles, m. 141° (effervescence). VII (0.3 g.) in Me2CO refluxed 3 h. with addition of KMnO4 gave 0.25 g. (80%) VIII, needles, m. 218.5° (from Me2CO). This oxidation also occurred in cold Me2CO but VIII was difficult to isolate. VIII was weakly basic, forming a picrate, orange needles, which partly dissociated on recrystn. The methylhydrazone of II similarly prepared, formed crystals, m. 78-9° (from aqueous EtOH). Crude II (3 g.) in EtOH and H2O refluxed 9 h. under N with 3 g. isatin and 3.6 g. KOH, filtered into 10% HOAc, and set aside overnight gave 3 g. 1,2-dihydro-1-methylquinolino(3',2',3,4)quinoline-4'-carboxylic acid (IX) as a scarlet solid, m. 172° (effervescence), stable in air, and forming a K salt only as a gum. IX (2 g.) heated 1 h. in a glass tube at 180° rising to 230°/0.01 mm. gave 1.25 g. (74%) 1,2-dihydro-1-methylquinolino(3',2',3,4)quinoline (X), yellow crystals, m. 98-100°, which apparently undergo air oxidation; di-HCl salt, colorless needles, unstable in air and becoming deep red; mono-HCl salt (XI), reddish-purple needles, m. 240-5°, stable indefinitely in vacuo, but decomposing on exposure to air (with aqueous NaOH it regenerated X); monpicrate, purple-red needles, m. 233° (decomposition); chloroplatinate, colorless amorphous solid rapidly becoming red in contact with hot solvents; bis(chlorosaurate), yellow powder, m. 235-40° (decomposition). X was recovered unchanged when treated with MeI, p-Me2NC6H4CHO, and HCl(NPh)NPh. X (0.65 g.) in dilute HCl refluxed 15 min.

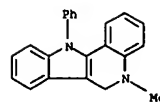
L7 ANSWER 258 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)
 under N gave 0.73 g. (100%) mono-HCl salt (XII) of 1,4'-dihydro-1-methylquinolino[3',2',3,4]quinoline (XIII) as a monohydrate, yellow needles, m. 243.5-4.5° (decompn.). A soln. of XII with excess dil. NaOH gave 92% yield XIII, orange plates, m. 155° (from Me2CO). XII was also obtained by refluxing a suspension of XI in H2O under N, and by warming XIII with dil. HCl. XIII gave a monopicate, m. 230° (decompn.), and a mono(chloroaurate) as an orange-brown amorphous powder, m. 205° (decompn.). X (0.4 g.) in 25 cc. cold Me2CO treated with KOtBu and shaken 1 h. gave 0.35 g. (83%) 1,2-dihydro-1-methyl-2-oxoquinolino[3',2',3,4]quinoline (XIV), cream needles, m. 218° (from Me2CO). X in C6H6 exposed to the air 7 days yielded XIV in almost theor. yield. XIV yielded a hydrated HCl salt, orange-yellow needles, m. 217-18°, but the picate was too unstable for purifn. XIII similarly oxidized with KOtBu yielded XIV. Also XIII in C6H6 exposed to the air gave XIV. XIII was stable in a desiccator for 14 days. XIII heated at 200-30°/0.1 mm. yielded X. IX shaken with 20% HCl yielded a blackish purple mono-HCl salt (XV), m. 170-2° (effervescence), which was unstable to heat. XV refluxed 0.5 h. under N with 20% HCl gave an insol. green mono-HCl salt (XVI), m. 250° (effervescence). Heating XVI 45 min. at 200°/0.01 mm. gave XVII. XV refluxed 7 h. yielded a yellow mono-HCl salt (XVII), m. 250° (effervescence). XVI or XVII with hot dil. aq. Na2CO3 gave 1,4'-dihydro-1-methylquinolino[3',2',3,4]quinoline-4'-carboxylic acid (XVIII), yellow hygroscopic needles, m. 138° (effervescence, resolidifying and remelting at 205-20°) (from H2O). XVIII forms a hydrate which was difficult to dehydrate. XVIII or either XVI or XVII in hot concd. KOH yielded a yellow hygroscopic impure K salt. The yellow Na salt was similarly obtained. XVI or XVII heated up to 250-300°/0.003 mm. gave XI and XII. XVIII cautiously heated at 15 mm. yielded X. 1,2-Dihydroquinolino[3',2',3,4]quinoline-4'-carboxylic acid (XIX), prep. by Clemm and Perkin's method (C.A. 18, 3382) in 82% yield, red microcrystals, m. 185°. XIX refluxed in hot HCl gave 1,4-dihydroquinolino[3',2',3,4]quinoline-4'-carboxylic acid hemihydrate, yellow amorphous solid, m. 201° (effervescence), λmax. 364-365 (ε 7980) and 224 mμ (ε 35400), λmin. 322-323 mμ (ε 3990), λinfl. 324-329 (ε 4000) and 246-250 mμ (ε 21800). XIX heated at 190-200°/0.1 mm. gave a yellow sublimate (XX), m. 227-8°, λmax. EtOH 360-363 (ε 12300), 301 (3140), 296 (3000), 253 (ε 19000), 243 (ε 18000), and 225 mμ (ε 44800), λmax. 390 (ε 14300), 247 (ε 21200), and 226 mμ (ε 37400) (in 0.1N HCl). XIX in hot HCl gave a mono-HCl salt, yellow needles, m. 310-12° (decompn.), from which XIX was readily regenerated by alkali. The yellow 1-Ph analog of X refluxed 15 min. in concd. HCl deposited a red cryst. mono-HCl salt (as XI), m. 280° (decompn.). The soln. refluxed 6 h. yielded the isomeric yellow cryst. mono-HCl salt (as XII), m. 226-30° (decompn.). This salt with aq. NaOH yielded a dull orange base, but insufficient material precluded further investigation.

IT 855611-90-4, 5H-Indolo[3,2-c]quinoline, 6,11-dihydro-5-methyl-11-phenyl- (and derivs.)
 RN 855611-90-4 CAPLUS
 CN 5H-Indolo[3,2-c]quinoline, 6,11-dihydro-5-methyl-11-phenyl- (5CI) (CA INDEX NAME)

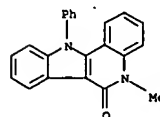
L7 ANSWER 258 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



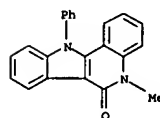
L7 ANSWER 258 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



IT 855612-44-1, 5H-Indolo[3,2-c]quinolin-6(11H)-one, 5-methyl-11-phenyl- 855612-45-2, 5H-Indolo[3,2-c]quinolin-6(11H)-one, 5-methyl-11-phenyl-, picate (preparation of)
 RN 855612-44-1 CAPLUS
 CN 5H-Indolo[3,2-c]quinolin-6(11H)-one, 5-methyl-11-phenyl- (5CI) (CA INDEX NAME)



RN 855612-45-2 CAPLUS
 CN 5H-Indolo[3,2-c]quinolin-6(11H)-one, 5-methyl-11-phenyl-, picate (5CI) (CA INDEX NAME)
 CM 1
 CRN 855612-44-1
 CMF C22 H16 N2 O

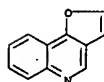


CM 2
 CRN 88-89-1
 CMF C6 H3 N3 O7

L7 ANSWER 259 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 1955:12372 CAPLUS
 DN 49:12372
 DREF 49:2526d-e
 TI Furo- and thienoquinolindines
 PA Farbenfabriken Bayer A.-G.
 DT Patent
 LA Unavailable
 FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
GB 703277		19540202	GB	

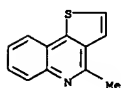
 PI <--
 AB Same as U.S. 2,650,226 (C.A. 48, 12183c).
 IT 234-07-1, Furo[3,2-c]quinoline (deriva.)
 RN 234-07-1 CAPLUS
 CN Furo[3,2-c]quinoline (8CI, 9CI) (CA INDEX NAME)



L7 ANSWER 260 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 1955:12371 CAPLUS
 DN 49:12371
 OREF 49:2526c-d
 TI o-Hydroxydihydroquinoline carboxylic acids
 PA Badische Anilin- & Soda-Fabrik (I. G. Farbenindustrie Akt.-Ges. "In
 Auflösung")
 DT Patent
 LA Unavailable
 FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
GB 700729		19531209	GB	

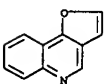
 PI
 <--
 AB o-Hydroxydihydroquinoline carboxylic acids, specifically,
 1,2-dihydro-4-methyl-7-hydroxyquinoline-6-carboxylic acid (I), may be
 prepared by heating the corresponding p-(N-oxoalkylamino)-salicylic
 acids.
 Addition of Me vinyl ketone, β -bromoethyl Me ketone, or vinylacetylene
 in the presence of water and a mercuric salt, to the sodium salt of
 4-aminosalicylic acid in methanolic solution yields 4-(N- γ -oxobutyl-
 amino)salicylic acid. Heating at 55° for 1 h., removing the
 solvent, and acidifying produces I (yellowish, m. 203-5°, after
 solution in aqueous NaHCO₃ and precipitation with acid.) I shows
 bacteriostatic effect on
 tubercle bacilli.
 IT 95389-31-4, Thieno[3,2-c]quinoline, 4-methyl-
 (derivs.)
 RN 95389-31-4 CAPLUS
 CN Thieno[3,2-c]quinoline, 4-methyl- (7CI) (CA INDEX NAME)



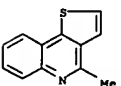
L7 ANSWER 261 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)
 AN 1955:12371 CAPLUS
 DN 49:12371
 OREF 49:2526c-d
 TI o-Hydroxydihydroquinoline carboxylic acids
 PA Badische Anilin- & Soda-Fabrik (I. G. Farbenindustrie Akt.-Ges. "In
 Auflösung")
 DT Patent
 LA Unavailable
 FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
GB 700729		19531209	GB	

 PI
 <--
 AB o-Hydroxydihydroquinoline carboxylic acids, specifically,
 1,2-dihydro-4-methyl-7-hydroxyquinoline-6-carboxylic acid (I), may be
 prepared by heating the corresponding p-(N-oxoalkylamino)-salicylic
 acids.
 Addition of Me vinyl ketone, β -bromoethyl Me ketone, or vinylacetylene
 in the presence of water and a mercuric salt, to the sodium salt of
 4-aminosalicylic acid in methanolic solution yields 4-(N- γ -oxobutyl-
 amino)salicylic acid. Heating at 55° for 1 h., removing the
 solvent, and acidifying produces I (yellowish, m. 203-5°, after
 solution in aqueous NaHCO₃ and precipitation with acid.) I shows
 bacteriostatic effect on
 tubercle bacilli.
 IT 95389-31-4, Thieno[3,2-c]quinoline, 4-methyl-
 (derivs.)
 RN 95389-31-4 CAPLUS
 CN Thieno[3,2-c]quinoline, 4-methyl- (7CI) (CA INDEX NAME)



RN 95389-31-4 CAPLUS
 CN Thieno[3,2-c]quinoline, 4-methyl- (7CI) (CA INDEX NAME)



L7 ANSWER 261 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 1954:68282 CAPLUS
 DN 48:68282
 OREF 48:12183c-1,12184a-b
 TI Furo- and thienosquinaldines
 IN Andersag, Hans; Timpler, Helmut
 PA Schenley Industries, Inc.
 DT Patent
 LA Unavailable
 FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2650226		19530825	US	

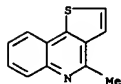
 PI
 <--
 GI For diagram(s), see printed CA Issue.
 AB The preparation of A is described where X is S or O and Y is H or Me; in
 addition
 there may be 1 or 2 substituents (R) at positions 6, 7, 8, and/or 9
 selected from the group consisting of lower-alkyl, lower-alkoxy,
 lower-alkanoylamino, lower-carbalkoxy, Cl, NC, and amino groups. E.g.
 the
 Schiff's base (I), 20, prepared from PhNH₂ and O.CH₂.CH₂.CHAC.C.O, boiled
 1-2 hrs. with stirring in Tetralin 100 containing P205 20 parts, the
 Tetralin
 decanted, and the residue mixed with ice water and NH₃ gave after
 distillation
 2,3-dihydro-4-methylfuro[3,2-c]quinoline, b₄-5 169-70°, m.
 140° (from ligroine) (HClO₄ salt, m. 245°; HCl salt, m.
 268°). Anhydrous ZnCl₂ 20 at the above temperature or concentrated
 H₂SO₄ 200
 parts at 50° may be used in place of the P205. In an analogous
 manner were prepared the following 2,3-dihydrofuro[3,2-c]quinolines:
 4,8-Me(MeO), m. 126° (HCl salt, m. 263°); 4,7-Me(MeO), m.
 163°; 4,6-Me(MeO), m. 190°; 4,6,9-Me(MeO)₂, m. 193°;
 6,4-ClMe, m. 130°; 8,4-ClMe, m. 169°; 4,6-di-Me, m.
 117°; 4,8-di-Me, m. 141°, and 4,8-Me(NC), m. 230°.
 4-H₂NC₆H₄NHAC 150 g. was boiled 4 hrs. with AcCH₂CO₂Et (II) 30 g. in MeOH
 500 cc., cooled, the Schiff base (III), m. 182°, filtered off,
 about 200 g. III stirred portionwise into 1 l. 1-ClOH₇Cl (IV) at
 250°, the mixture cooled, and the 4-hydroxy-6-acetamidodisquinaldine (V)
 removed and washed with 6H₆; it doesn't melt below 300°; V 216 was
 added to a refluxing solution of MeOEt containing Na 32 g. in 1 l. EtOH,
 then
 CH₂:CHCH₂Br (VI) 120 g. added with further boiling, the mixture refluxed
 3
 hrs., most of the EtOH distilled off, and the
 4-allyloxy-6-acetamidodisquinaldine
 (VII), m. 176°, precipitated with Et₂O. Approx. 150 g. VII was stirred
 into 500 cc. of IV at 220-30°, the solution cooled after 10 min. with
 stirring, filtered, and the solid washed with C₆H₆; the
 3-allyl-4-hydroxy-6-acetamidodisquinaldine (VIII) doesn't melt up to
 300°. About 125 g. VIII was added to 500 cc. HBr solution (d. 1.7) at
 room temperature, the mixture stirred 15 hrs., twice the volume of H₂O
 added, and
 the mixture boiled until solution was affected and poured into dilute
 NaOH solution,
 precipitating 2,3-dihydro-2,4-dimethyl-8-aminofuro[3,2-c]quinoline, m.

L7 ANSWER 262 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 1954:68281 CAPLUS
 DN 48:68281
 OREF 48:12183c-1,12184a-b
 TI Bis(hydroxytetrahydroisquinolyl)alkanes
 IN Craig, Paul N.; Nebenbauer, Fred P.
 PA Smith, Kline & French Laboratories
 DT Patent
 LA Unavailable
 FAN.CNT 1

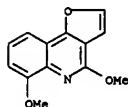
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2659728		19531117	US	

 PI
 <--
 GI For diagram(s), see printed CA Issue.
 AB Comps. of the general formula I, where R₁ and R₂ are H or lower alkyl, n
 is an integer from 1 to 3, and m is an integer from 1 to 12, are
 prepared by
 the reduction of the corresponding MeO-substituted 3,4-dihydro compound
 to
 the tetrahydro derivative, followed by demethylation. Thus, 20 g.
 1,1-bis-(6,7-dimethoxy-3,4-dihydro-1-isoquinolyl)methane-2HCl in 200 cc.
 EtOH, with 1 g. P₂O₅ reduced under 50 lb. H, the whole filtered, and the
 EtOH evaporated gave a mixture of the 2 isomeric forms of the tetrahydro
 derivative
 (I) (no m.p. given). I (18 g.), 40 g. 48% HBr, and 1 g. 50% H₂O₂ heated
 until the evolution of MeBr and HCl ceased, and the whole concentrated
 in vacuo
 gave the 2 isomeric forms of 1,1-bis(6,7-dihydroxy-1,2,3,4-tetrahydro-1-
 isoquinolyl)methane-2-HBr, m. 264°. A similar reduction of
 1,4-bis(6,7-dimethoxy-3,4-dihydro-1-isoquinolyl)butane gave an alc.-insol
 tetrahydro derivative-2HCl (II), m. 262-4°, and an alc.-soluble isomer
 (III), m. 258-60°. II as above gave the 6,7-di-HO analog-2HBr, m.
 267° (from alc.); III gave the isomer, m. 254°. The
 following bis(6,7-dimethoxy-3,4-dihydro-1-isoquinolyl) derivs. (all
 di-HCl
 salts) were similarly treated [number of C atoms m. in alkylene chain,
 m.p.
 of the mixture of 6,7-dimethoxytetrahydro-2HBr derivs. or of each of the
 2
 isomers (and in brackets the m.p. of the mixture of the 6,7-
 dihydroxytetrahydro-2HBr derivs. or of each of the 2 isomers)]: 5,
 235-9° (from aqueous alc.), 224-7° (from alc.-Me₂CO)
 [185-7° (from aqueous alc.), 187-9° (with decomposition) (from aqueous
 alc.)]; 6, (II) 271-3° (from H₂O) [240-50° (from
 alc.-Me₂CO), (III) 275-6°, 262-5° (from H₂O)]; 7,
 231-4° (from alc.-Me₂CO), 156-8° (from alc.-Me₂CO)
 [184-5° (with decomposition) (from H₂O), 170-4° (with decomposition)
 (from H₂O)]; 8, 215-18°, 248-50° [259-63°,
 254-5° (all from H₂O)]; 9 and 10, no phys. properties given.
 Related series of derivs. were obtained from (a) 1,6-bis(6-methoxy-3,4-
 dihydro-1-isoquinolyl)hexane-2HCl, 277-9° (mixture) [271-3°
 (mixture) (from MeOH-Et₂O)]; (b) 1,6-bis(6,7,8-trimethoxy-3,4-dihydro-1-
 isoquinolyl)hexane-2HCl, no phys. properties given; (c)
 1,6-bis(6,7-dimethoxy-3-methyl-3,4-dihydro-1-isoquinolyl)hexane, above
 300° (mixture) [277-85° (from aqueous alc.) (mixture)]; (d) the
 3-Me₂CH and (e) the 4-Me derivative, no phys. properties given. II (10
 g.)
 and 30 g. concentrated HCl kept 3 hrs. at 160° and the whole evaporated
 gave
 the di-HCl salt (IV) corresponding to III; IV and aqueous NaHCO₃ gave
 the free

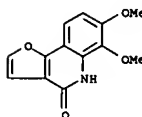
L7 ANSWER 262 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)
 base (V), yellow solid, m. 100-200° (decompn.), unstable in air or
 in soln. in org. solvents. V formed cryst. acetate and tartrate salts.
 IT 95389-31-4, Thieno[3,2-c]quinoline, 4-methyl-
 (derivs.)
 RN 95389-31-4 CAPLUS
 CN Thieno[3,2-c]quinoline, 4-methyl- (7CI) (CA INDEX NAME)



L7 ANSWER 263 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 1953:31137 CAPLUS
 DN 47:31137
 OREF 47:5252e-f
 TI Ultraviolet absorption spectra of skimmianine, γ-fagarine, and their
 derivatives
 AU Deulofeu, Venancio; Bassi, Daniel
 CS Univ. Buenos Aires
 SO Anales de la Asociacion Quimica Argentina (1921-2001) (1952),
 40, 249-59
 CODEN: AAQAAE; ISSN: 0365-0375
 DT Journal
 LA Unavailable
 AB The results are given of a study of the UV absorption spectra of
 skimmianine and γ-fagarine, and of 2 series of their derivs., one
 series having a furoquinoline structure and the other series consisting
 of
 oxidation products with a quinoline structure. Both series of derivs.
 give
 spectra similar to that of substituted quinolines, but the results did
 not
 permit definite correlations with minor structural variations, especially
 substituents in the quinoline nucleus.
 IT 110054-68-7, Furo[3,2-c]quinoline, 4,6-dimethoxy-
 640721-91-1, Furo[3,2-c]quinolin-4(5H)-one, 6,7-dimethoxy-
 640721-92-2, Furo[3,2-c]quinolin-4(5H)-one, 6-methoxy-
 (spectrum of)
 RN 110054-68-7 CAPLUS
 CN Furo[3,2-c]quinoline, 4,6-dimethoxy- (6CI) (CA INDEX NAME)

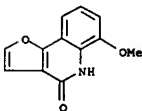


RN 640721-91-1 CAPLUS
 CN Furo[3,2-c]quinolin-4(5H)-one, 6,7-dimethoxy- (5CI) (CA INDEX NAME)



RN 640721-92-2 CAPLUS
 CN Furo[3,2-c]quinolin-4(5H)-one, 6-methoxy- (5CI) (CA INDEX NAME)

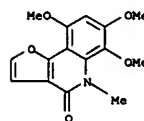
L7 ANSWER 263 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



L7 ANSWER 264 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 1952:23499 CAPLUS
 DN 46:23499
 OREF 46:4016a-1,4017a-d
 TI Alkaloids of the Australian Rutaceae. The structure and reactions of
 acronycidine
 AU Lahey, F. N.; Lamberton, J. A.; Price, J. R.
 CS Univ. Queensland, Australia
 SO Australian J. Sci. Research (1950), 3A, 155-71
 DT Journal
 LA Unavailable
 AB Acronycidine, C₁₅H₁₅O₅N (I), shown to be 4,5,7,8-tetramethoxyfuro[2,3-
 b]quinoline, crystallizes from MeOH or EtOH in colorless needles, m.
 136.5-7.5°, [α]_D²⁰ 0° (CHCl₃), very soluble in CHCl₃,
 insol. in aqueous alkalis, soluble in dilute acids, gives a pale yellow
 unstable
 HCl salt, m. 120-1° (decomposition), on addition of HCl to its Me₂CO
 solution,
 and a yellow picrate, m. 181.5-2.5° (from MeOH). No Ac or Bz
 derivative, oxime, or semicarbazone could be prepared Heating 0.05 g.
 with
 excess (0.5 mL.) MeI 4 h. at 100° in a sealed tube gave, on evaporation
 of the MeI, a colorless isomer, isoacronycidine [5,7,8-trimethoxy-9-
 methylfuro[2,3-b]quinolin-4(9H)-one] (II), m. 172-3° (from H₂O),
 fluorescing blue in alc. solns., and giving a yellow HCl salt, m.
 188-90°, (uncor.). II is decomposed by H₂O, and converted by heating
 at its m.p. to cream norisoacronycidine, C₁₄H₁₃O₅N (III), m. 226-7°
 (from CHCl₃-alc.) [acetate, m. 174-5° (from xylene)], reconverted
 to II by Me₂SO₄ and NaOH; it is 5-hydroxy-7,8-dimethoxy-9-methylfuro[2,3-
 b]quinolin-4(9H)-one. Hydrogenation of I in EtOH (Raney Ni) at
 atmospheric
 pressure gave white dihydroacronycidine (IV), C₁₅H₁₇O₅N, m.
 188.5-90.5° (from EtOH, then EtOAc). The reactions of I are
 characteristic of furoquinoline alkaloids, and it has been degraded by a
 series of reactions to 2,4,5-(MeO)₃C₆H₂CO₂H, as follows: (a) I in Me₂CO
 with powdered KMnO₄ yielded 2-hydroxy-4,5,7,8-tetramethoxy-2-
 quinolinecarboxylic acid (V), m. 210-12° (from alc.), and the
 corresponding aldehyde (VI), m. 219.5-20.5° [2,4-
 dinitrophenylhydrazone, dark red, m. 302-4° (decomposition, uncor.)].
 (b) Refluxing 1 g. V 1.5-2 h. in 40 mL. 5 N HCl gave 0.8-0.9 g. of a HCl
 salt (VII), m. 197-8°, with loss of a MeO and a CO₂H group; the
 free base (VIII), C₁₂H₁₃O₃N, m. 231-2° (mono-Ac derivative, m.
 204-6°), obtained by treating VII in H₂O with NaOAc and extracting with
 CHCl₃, was 5,7,8-trimethoxy-2,4-dihydroxyquinoline. (c) Acidifying VIII
 in 5% ice-cold NaOH containing 1 mol NaNO₂ precipitated the red
 3-nitroso derivative
 (IX), C₁₂H₁₂O₆N₂, of VIII, m. 241-3°, after recrystg. the Na salt
 from 10% NaOH and again acidifying with AcOH. (d) IX (2 g.) dissolved in
 80 mL. boiling 30% H₂SO₄ (frothing), heated 15-20 min. more, and cooled,
 gave dark red 4,6,7-trimethoxyisatin (X), crystallizing from PrOH, then
 H₂O, in
 yellow needles, darkening and decomposing above 260°, m. 270°.
 This reaction appears to be of general application for converting
 2,4-dihydroxyquinolines to isatins; isatin and 6,7-dimethoxyisatin
 (identified by mixed pts. and derivs.) were similarly prepared from the
 3-NO
 derivs. of 2,4-dihydroxy- and 7,8-dimethoxy-2,4-dihydroxyquinoline
 (prepared
 from the alkaloid skimmianine), resp. X gave a yellow phenylhydrazone,
 m.
 220.5-1.5° (from alc.), a pale yellow oxime, m. 210°

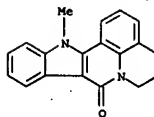
L7 ANSWER 264 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)
 (decompn.), from H₂O, and in alc. with o-C₆H₄(NH₂)₂ a yellow phenazine, m.
 281-2° (decompn.). (e) X (0.5 g.) in hot aq. NaOH (1.5 g. in 4.5 mL.) treated dropwise with 30% H₂O₂ until acidification no longer gave a red color and carefully acidified with HCl yielded 0.1 g. 2-amino-3,4,6-trimethoxybenzoic acid (XI), m. 127.5-8.5° (from C₆H₆/light petroleum), which with HNO₂ and then alk. 2-naphthol gave a bright red ppt. (f) XI (200 mg.), suspended in 0.9 mL. 10% HCl, treated at 0° with 62 mg. NaNO₂ in 0.2 mL. H₂O gave a yellowish brown soln. from which, on filtering into 6 mL. cold H₃PO₄ and keeping 3 h. at 0°, 145 mg. needles of 2,4,5-(MeO)₃C₆H₂CO₂ (XIII), m. 143.5-4.5°, sepd. From XII 2,4,5-trimethoxynitrobenzene was prepd. 2,4,5-(MeO)₃C₆H₂NO₂, m. 129-30°. Refluxing 1 h. with 20% KOH in iso-PrOH, PrOH, or EtOH, and cooling, gave a cryst. solid whose aq. soln. satd. with CO₂ yielded a phenolic base, 4-hydroxy-5,7,8-trimethoxyfuro[2,3-b]quinoline (XIII), C₁₄H₁₁O₅N, m. 185.5-6.5° (from EtOAc), and a basic fraction, m. 98-100° (picrate, m. 184.5-5.5°), indicating some ether interchange. XIII is sol. in aq. NaOH, couples readily with diazonium salts in alk. soln., can be methylated to II, and gives a cream benzoate, m. 142.5-3.5° (from aq. alc.), and a colorless acetate, m. 133.5-4.5° (from alc.); its hydrochloride was obtained. Refluxing 4 g. I 6 h. in alc. HCl (12 mL. 35%/50 mL. alc.), gave XIII.HCl, from whose soln. in warm H₂O the base was pptd. with NaOAc.
 I, II, III, IV, and XIII all readily undergo oxidative demethylation to quinones. Careful addn. of 20 mL. 68% HNO₃ to an aq. suspension of I (5 g./20 mL.) yields a cryst. mass, which on purifn. gives over 90% yellow 4,7-dimethoxyfuro[2,3-b]quinoline-5,8-dione, (XIV), C₁₃H₉O₅N, m. 299-300° (decompn.). XIV could not be acetylated, but reductive acetylation (Ac₂O, Zn dust, and pyridine), yielded a diacetyldihydro deriv., m. 234-5° (uncor.), and Na₂S₂O₄ gave a colorless hydroquinone, at once reoxidized by air. Alk. hydrolysis of XIV gave a dull yellow hydroxyquinone (XV), C₁₂H₇O₅N, m. 300° (yellow monoacetate, decomp. above 200°); a triacetyldihydro deriv., m. 196-7° (uncor.), by reductive acetylation; and a violet phenazine, decomp. 245°, with o-C₆H₄(NH₂)₂, with subsequent demethylation of the 7-MeO group. Similarly II and III both form a reddish orange monomethoxy-5,8-quinone (XVI), C₁₃H₁₁O₅N, m. 250-1° (decompn.), by oxidn. of the 5-MeO(HO) and 8-MeO groups; IV a yellow dimethoxyquinone, C₁₃H₁₁O₅N, decomp. 245-50°; and XIII a reddish orange acidic monomethoxyquinone (XVII), C₁₂H₇O₅N, decomp. above 245° (Ac deriv., decomp. above 200°; violet phenazine, decomp. 245°). XVII is a 5,8-quinone, formed by oxidn. of the 5- and 8-MeO groups in XIII. Reductive methylation of XVI gave a mixt. of II and III; XVII gave II; and XV gave in some expts. II, and in others a mixt. of II with a weakly basic isomer of I and II, viz., 5-methyl-6,7,9-trimethoxyfuro[3,2-c]quinolin-4(5H)-one (XVIII), m. 219-20° (from MeOH); XVIII was also obtained by methylating I. The UV absorption spectra of I, II, III, and skimmianine were detd. Some pharmacol. properties of I were also studied; in its most marked properties, the effect on voluntary muscle and causing cessation of heart beat, it resembles skimmianine.
 IT 854704-27-1, Furo[3,2-c]quinolin-4(5H)-one, 6,7,9-trimethoxy-5-methyl-

L7 ANSWER 264 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)
 (prepn. of)
 RN 854704-27-1 CAPLUS
 CH Furo[3,2-c]quinolin-4(5H)-one, 6,7,9-trimethoxy-5-methyl- (5CI) (CA INDEX NAME)



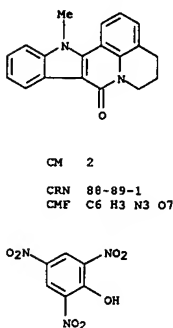
L7 ANSWER 265 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 1952:5561 CAPLUS
 DN 46:5561
 OREF 46:990a-1
 TI Structure and properties of certain polycyclic indole and quinoline derivatives. III. Derivatives of 1,2,2a,3,4,5,8,9,10a-decahydro-5,8-diketo-2a,10a-diazapyrene
 AU Almond, C. Y.; Mann, Frederick G.
 CS Univ. Cambridge, UK
 SO Journal of the Chemical Society, Abstracts (1951) 1906-9
 CODEN: JCSAAZ; ISSN: 0590-9791
 DT Journal
 LA Unavailable
 OS CASREACT 46:5561
 GI For diagram(s), see printed CA Issue.
 AB 1,2,3,4-Tetrahydroquinoxaline (I) (20 g.) in 45 g. boiling AcOH, treated (30 min.) with 32 g. CH₂:CHCN, boiled 7 hrs., neutralized with saturated Na₂CO₃, and extracted with CHCl₃, gives 80% of the 1,4-bis(2-cyanoethyl) derivative (II) of I, m. 88.5-9°; 30 g. II, 60 g. KOH, and 400 cc. H₂O, refluxed 3 hrs. and acidified with HCl, give 71% of the 1,4-bis(2-carboxyethyl) derivative (III) of I, m. 136-7°. II (20 g.), added to 60 g. AlCl₃, 250 cc. PhCl, and 3 cc. concentrated HCl and heated 6 hrs. at 140-60°, gives 63% 1,2,2a,3,4,5,8,9,10a-decahydro-5,8-diketo-2a,10a-diazapyrene (IV), brilliant red, m. 245-6°; bisphenylhydrazones (V), golden, m. 242-4°, 77%. III could not be cyclized to IV by P₂O₅, POCl₃, or H₂SO₄. V (2 g.), 125 cc. saturated EtOH-HCl, and 125 cc. EtOH, refluxed 3 hrs. and the resultant precipitate in hot H₂O made alkaline, give 50% 1,2,2a,3,10,10a-hexahydrodiindolo-(3',2':4,5)(2'',3'':8,9)-2a,10a-diazapyrene (VI), bright yellow, m. 438-9°; the infrared spectrum indicates that it is not the bis- ω -indole. IV (4 g.), 8 g. isatin, 48 cc. 30% aqueous KOH, and 80 cc. EtOH, boiled (N atmospheric) 18 hrs., poured into air-free H₂O, and precipitated with AcOH, give 85% 1,2,2a,3,10,10a-hexahydrodiindolo-(3',2':4,5)(2'',3'':8,9)-2a,10a-diazapyrene-4,4'-dicarboxylic acid (VII), dark green, m. 242-6°; since a satisfactory solvent could not be found, the Na salt (bright red) was prepared in 20% aqueous NaOH and crystallized from 10% air-free NaOH. VII, heated at 300°/0.01 mm., gives 1,2,2a,3,10,10a-hexahydrodiindolo-(3',2':4,5)(2'',3'':8,9)-2a,10a-diazapyrene (VIII), bright red (purified by sublimation at 210-20°/5 + 10-6 mm.), m. 156-8°. Cold saturated KMnO₄ in Me₂CO, added to 3 g. VIII in 500 cc. Me₂CO, gives 41% 1,2,2a,3,10,10a-hexahydro-3,10-diketodiquinolino-(3',2':4,5)(2'',3'':8,9)-2a,10a-diazapyrene, orange, m. 428-30°. Absorption spectra are given for II and VIII in EtOH and for V in MeOCH₂CH₂OH.
 IT 855225-02-4, 4H-Benz[1j]indolo[2,3-b]quinolizin-8-(5H)-one, 6,13-dihydro-13-methyl- (preparation of)
 RN 855225-02-4 CAPLUS
 CN 4H-Benz[1j]indolo[2,3-b]quinolizin-8-(13H)-one, 5,6-dihydro-13-methyl- (5CI) (CA INDEX NAME)

L7 ANSWER 265 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

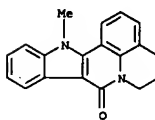


L7 ANSWER 266 OF 273 CAPLUS COPYRIGHT 2005 ACS ON STN
 AN 1952:5560 CAPLUS
 DN 46:3560
 OREF 46:9881,989a-1,990a
 TI Structure and properties of certain polycyclic indole and quinoline derivatives. I. Derivatives of 1-ketotolulolidine
 AU Mann, Frederick G.; Smith, Bryan B.
 CS Univ. Cambridge, UK
 SO Journal of the Chemical Society, Abstracts (1951) 1898-1905
 CODEN: JCSAAZ; ISSN: 0590-9791
 DT Journal
 LA Unavailable
 OS CASREACT 46:5560
 GI For diagram(s), see printed CA issue.
 AB cf. C.A. 44, 3997a. 1,2,3,4-Tetrahydroquinoline and CH₂:CHCN in AcOH give
 73% of the 1-(2-cyanoethyl) derivative (I), b₁₄ 197-9°. I (247 g.) and 350 g. KOH in 2.5 l. H₂O, boiled 2.5 hrs. and acidified with HCl, give
 80% crude 1-(2-carboxyethyl)-1,2,3,4-tetrahydroquinoline (II), m. 69-71°; HCl salt, m. 171.5°. I is not cyclized by AlCl₃ in PhCl. II (71 g.) and 500 cc. xylene, added in turn to a mixture of 50 g. P205 and 25 g. Hyflo Supercel, boiled 1 hr., and the residue extracted with boiling xylene, give 31% 1-ketotolulolidine (III), yellow, b_{0.2} 127-30°, m. 62.5-3.5°. PhN(CH₂CH₂CN)₂ (9 g.), 30 g. AlCl₃, 1.5 cc. concentrated HCl, and 30 cc. PhCl, heated 6 hrs. at 140°, give 4.5 g. 1,6-diketotolulolidine (IV), yellow, b_{0.3} 190-210°, m. 145-6°; osazone (3.4 g. from 2 g. IV), yellow, m. 248°. III (14.9 g.) and 13.4 g. isatin, added to 16 g. KOH in 87 cc. EtOH and 17.5 cc. H₂O, refluxed (N atmospheric) 15 hrs. and the cooled filtrate added slowly to 200 cc. 10% AcOH, give 52% quinolino(2',3':1,2)juloline-4''-carboxylic acid (V), m. 177.5-9° (not pure because of ready atmospheric oxidation); K salt, yellow gum. V (12 g.), heated at 250°/0.2 mm. and 9 g. of the sublimed base (bright yellow glass) crystallized from EtOH in N atmospheric, gives 7.8 g. of the bright yellow form of quinolino(2',3':1,2)juloline (VI), m. 150°. Addition of dilute aqueous HCl to VI in cold Me₂CO gives the HCl salt (VII), with 2 mols. H₂O, deep red, m. 390° (after a series of color changes and probable transformation into the salt of the orange base); monomethiodide, m. 173.5° (decomposition); mono-p-methotoluenesulfonate (VIIIA), very pale lemon yellow, m. 207° (NaI in Me₂CO gives VIIIA). VI, boiled with dilute HCl, gives a clear yellow solution with a green fluorescence; addition to warm dilute NaOH gives the bright orange isomer (IX), m. 190°; IX results on boiling VII with H₂O or dilute HCl. HCl salt of IX, with 0.5 mol. EtOH, yellow, m. 388° (EtOH lost at 100°/0.1 mm. in 6 hrs.); mono-p-toluenesulfonate, yellow, m. 253-6° (prepared from VI in EtOH at room temperature, by heating VI and 2 mols. acid in a sealed tube, or from IX and the acid in EtOH); Me ester (X), bright yellow, m. 171-1.5°; methiodide (XI), yellow, m. 220° (NaI and X in Me₂CO also give XI). IX, heated 20 min. at 200° in a sealed tube, gives VI. VI, heated 6 hrs. at 110° in a stream of air, gives 3-ketotolulolidine(2',3':1,2)juloline (XII), cream,

L7 ANSWER 266 OF 273 CAPLUS COPYRIGHT 2005 ACS ON STN (Continued)

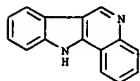


L7 ANSWER 266 OF 273 CAPLUS COPYRIGHT 2005 ACS ON STN (Continued)
 m. 177°; XII also results on exposure (1 week) of VI or IX in C₆H₆ to the air at room temp. or by oxidation of VI with K₂Cr₂O₇ in Me₂CO; p-toluenesulfonate, yellow, m. 203°; XII does not react with boiling Me₂CO. VI is not reduced over Pt oxide at 80°/50 atm. (6 hrs.); at 100°/75 atm., a pale yellow gum is formed. VIIIA does not yield definite oxidation products; X is unaffected by heating in air
 4 hrs. at 125-50°; K₂Cr₂O₇ in Me₂CO does not give definite products. III phenylhydrazones (XIII), pale yellow, m. 117.5°, 84°. XIII (6 g.), added to 12 cc. concd. H₂SO₄ and 108 cc. H₂O, boiled (N atm.) 30 min., kept 2 hrs., and the sulfate treated with 10% NaOH, gives w-indolo(2',3':1,2)juloline (XIV), pale yellow, m. 198-9°; HCl salt (XV), m. 448°; methiodide, m. 364°. XIII (5 g.) in 200 cc. satd. EtOH-HCl and 125 cc. H₂O, boiled 4 hrs. and kept 48 hrs., gives 1 g. of the HCl salt of an isomer of XIV, m. 223-4°; after 14 days XV is the main constituent of the addnl. ppt. which seps. XIV is unchanged on heating in an O atm. 1.5 hrs. at 85° or by passage of O (14 hrs.) through a boiling EtOH-petr. ether soln. III methylphenylhydrazones, deep yellow, m. 72°, 77°; refluxed 1 hr. with dil. H₂SO₄ (N atm.), it yields 3-keto-1'-methylindolo(2',3':1,2)juloline, m. 211-11.5°; picrate, orange, m. 170-70.5°; it is probable that the crude reaction product contains the 1'-Me deriv. of XIV but it could not be isolated in a pure state.
 IT 855225-02-4, 4H-Benz[1]indolo[2,3-b]quinolizin-8-(5H)-one, 6,13-dihydro-13-methyl-855225-03-5, 4H-Benz[1]indolo[2,3-b]quinolizin-8-(5H)-one, 6,13-dihydro-13-methyl-, picrate (preparation of)
 RN 855225-02-4 CAPLUS
 CN 4H-Benz[1]indolo[2,3-b]quinolizin-8-(13H)-one, 5,6-dihydro-13-methyl- (5CI) (CA INDEX NAME)
 CM 1
 CRN 855225-02-4
 CMF C19 H16 N2 O

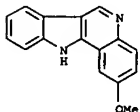


L7 ANSWER 267 OF 273 CAPLUS COPYRIGHT 2005 ACS ON STN
 AN 1950:35848 CAPLUS
 DN 44:35848
 OREF 44:6864e-1,6865a-g
 TI Attempts to find new antimalarials. XXIX. Synthesis of various derivatives of 2,3-benz-y-carboline
 AU Kermack, Wm. O.; Storey, Nora E.
 CS Roy. Coll. of Physicians, Edinburgh, UK
 SO Journal of the Chemical Society, Abstracts (1950) 607-12
 CODEN: JCSAAZ; ISSN: 0590-9791
 DT Journal
 LA Unavailable
 OS CASREACT 44:35848
 GI For diagram(s), see printed CA issue.
 AB cf. C.A. 44, 6349. Et 4-hydroxy-3-quinolinecarboxylate and PhNH₂, refluxed 1 hr., give 4-hydroxy-3-quinolinecarboxanilide (I), m. 316-18°. PhNHCH₂C(CO₂Et)₂ and PhNH₂, heated 1 hr. at 100°, give Et β-anilino-α-(phenylcarbonyl)acrylate (II), m. 118°; II, refluxed 30 min. in Ph₂, gives I. The compds. m. 318° and 118°, reported by Schofield and Simpson (C.A. 41, 1677c) are I and II, resp. 4-chloroquinoline (3.2 g.) and 2.1 g. o-C₆H₄(NH₂)₂, heated at 140°/20-30 mm., give 4-(o-aminoanilino)quinoline (III), buff., m. 165-6° (HCl salt, grayish white, m. 285-90°). III (3 g.) in 500 cc. N HCl at 5°, treated with 0.8 g. NaNO₂ in 10 cc. H₂O, gives 70% 4-(1H-benzotriazol-1-yl)quinoline (IV), m. 132-3°; 10 g. IV in 15 cc. sirupy H₃PO₄, heated until N evolution ceased, gives 77% 2,3-benz-y-carboline (V), m. 342°; methiodide (VI), m. 297°, 72%; VI in H₂O, made alkaline with NH₄OH, gives 4-methyl-2,3-benz-y-isocarboline (VII), with 1 mol. H₂O, yellow, m. 195°. V (0.54 g.) and 0.5 g. Et₂NCH₂CH₂Cl in 100 cc. PhNO₂, refluxed 9 hrs., give 4-(2-diethylaminoethyl)-2,3-benz-y-isocarboline, highly viscous liquid (with 1 mol. H₂O); the dihydrate, yellow, m. 84-6° (dimethiodide, m. 263-4°; the aqueous solution gives no precipitate with NH₄OH or NaOH). V (1.09 g.), 1.01 g. Et₂NCH₂CH₂Cl, 1.95 g. NaNH₂, and 10 cc. PhMe, heated 30 min. at 70°, 30 min. at 115°, and refluxed 4 hrs., give 60% 1-(2-diethylaminoethyl)-2,3-benz-y-carboline, m. 103-4° [dimethiodide (VIII), m. 276-8°]. VII (0.5 g.) and excess Et₂NCH₂CH₂Cl, refluxed 6 hrs. in 20 cc. PhNO₂, the aqueous solution treated with KI, and the 4-methyl-1-(2-diethylaminoethyl)-2,3-benz-y-carbolinium iodide (m. 225°) treated with MeI in PhNO₂ at 100° give VII. p-MeOC₆H₄NH₂ (31 g.) and 54 g. EtOCH₂C(CO₂Et)₂, heated 45 min. on the steam bath, give Et (p-methoxyanilinomethyl)malonate, m. 38-40°, which yields 4-chloro-6-methoxyquinoline (IX) (Price and Roberts, C.A. 40, 5739.5). IX (3.9 g.) and 2.16 g. o-C₆H₄(NH₂)₂, heated at 140° under reduced pressure, give 4-(o-aminoanilino)-6-methoxyquinoline, m. 192°; the diazo reaction gives 6-methoxy-4-(1H-benzotriazol-1-yl)quinoline, m. 129-30°; heated with sirupy H₃PO₄, it yields 2'-methoxy-2,3-benz-y-carboline (XI), m. 315° (di-HCl salt, with 0.75 mol. H₂O, m. 310°); in 1 experiment the reaction product was 4-anilino-6-methoxyquinoline, pale yellow, m. 220° (prepared also by heating 3 hrs. at 100° 1 g. IX and 0.5 g. PhNH₂ with a trace of Cu bronze). XI and Et₂NCH₂CH₂Cl in PhNO₂, heated 6 hrs. at 100°, give 2'-methoxy-4-(2-diethylaminoethyl)-2,3-benz-y-isocarboline, a yellow oil (bis(3,5-dinitrobenzoate), m. 268°). 4,6-Dichloroquinoline (XII) (9.9 g.) and 5.4 g. o-C₆H₄(NH₂)₂ with a trace of Cu, heated at 140° under reduced

L7 ANSWER 267 OF 273 CAPLUS COPYRIGHT 2005 ACS ON STN (Continued)
 pressure, give 6-chloro-4-(o-aminoanilino)quinoline (XIII), m.
 186-7°; 0.54 g. XIII and XII, heated with Cu 30 min. at
 140°, give N,N'-bis[6-chloro-4-quinolyl]-o-phenylenediamine (XIV)
 m. 342-4°; this results as a by-product in the prep. of XIII. XIV
 and Me2SO4 in PhNO2, heated 2 hrs. at 130° and treated with satd.
 aq. KI, give the dimethiodide, with 2 mols. H2O, m. 330-2°. XIII,
 through the diazo compd., gives 6-chloro-4-(1H-benzotriazol-1-
 yl)quinoline, m. 185-6°; heating in sirupy H3PO4 gives
 2'-chloro-2,3-benz-y-carboline (XV), m. above 360°. XV and
 excess MeI at 100° give the methiodide (m. 225°) which with
 NaOH gives 2'-chloro-4-methyl-2,3-benz-y-isocarboline, with 1 mol.
 H2O, yellow, m. 245°. XV (0.25 g.) and 0.2 g. Et2NCH2CH2Cl, heated
 9 hrs. in 50 cc. PhNO2 and the ppt. treated with NH4OH, give
 2'-chloro-4-(2-diethylaminoethyl)-2,3-benz-y-isocarboline, m.
 125-6°. XV (0.25 g.), 0.14 g. Et2NCH2CH2Cl, 0.03 g. NaNH2, and 10
 cc. PhMe, heated 30 min. at 70°, 30 min. at 115°, and
 refluxed 4 hrs., give 2'-chloro-1-(2-diethylaminoethyl)-2,3-benz-y-
 carboline, m. 114-15°.
 IT 239-09-8, 11H-Indolo[3,2-c]quinoline
 (and derivs.)
 RN 239-09-8 CAPLUS
 CN 11H-Indolo[3,2-c]quinoline (6CI, 7CI, 8CI, 9CI) (CA INDEX NAME)



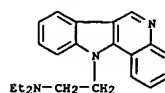
IT 4295-45-8, 11H-Indolo[3,2-c]quinoline, 2-methoxy-
 65287-62-9, 11H-Indolo[3,2-c]quinoline, 11-(2-diethylaminoethyl)-
 855612-22-5, 11H-Indolo[3,2-c]quinoline, 2-chloro-11-(2-
 diethylaminoethyl)- 855612-23-6, 11H-Indolo[3,2-c]quinoline,
 2-chloro-
 (preparation of)
 RN 4295-45-8 CAPLUS
 CN 11H-Indolo[3,2-c]quinoline, 2-methoxy- (7CI, 8CI, 9CI) (CA INDEX NAME)



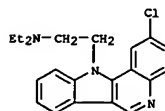
RN 65287-62-9 CAPLUS
 CN 11H-Indolo[3,2-c]quinoline-11-ethanamine, N,N-diethyl- (9CI) (CA INDEX NAME)

L7 ANSWER 268 OF 273 CAPLUS COPYRIGHT 2005 ACS ON STN
 AN 1950:35847 CAPLUS
 DN 44:35847
 OREF 44:6863g-1,6864a-f
 TI Chemotherapeutic derivatives of the acridine series. I. Derivatives of
 2-iodo-7-methyl-9-substituted aminoacridines
 AU Singh, Surjit; Singh, Mahan
 CS East Punjab Univ., India
 SO Journal of Scientific & Industrial Research (1950), 9B, 27-30
 CODEN: JSIRAC; ISSN: 0022-4456
 DT Journal
 LA Unavailable
 AB Antiseptic studies on 2-iodo-7-methyl-9-aminoacridine (C.A. numbering)
 indicate inhibition of Staphylococcus aureus, Bacterium coli, Bact.
 flexneri, and Bacillus subtilis in a dilution of 1:80,000. Results of
 other
 derivs., as prepared below, will be published later. 2,5-Diiodobenzoic
 acid
 in (I): To 53 g. finely powdered 5,2-I(H2N)C6H3CO2H dissolved with warming
 300-350 cc. 12% HCl and cooled slowly to 5-7° in an ice bath with
 mech. stirring was rapidly added 22 g. KNO2 in 100 cc. H2O, the unreacted
 HCl salt filtered off after completion of the diazotization, 8-10 g. urea
 was added to remove the excess HNO2, 40 g. KI in 300 cc. H2O added
 dropwise, stirring continued 30 min., the whole boiled 2 h, the
 light-brown to deep-yellow granular I washed well with H2O, reprecipd. from
 ammoniacal solution, and crystallized from alc., forming brown
 rhombohedral
 crystals, m. 182-3°. 5-Iodo-N-(p-methylphenyl)anthranilic acid
 (II): To 4 g. K metal in 40 cc. absolute alc. was added 30 g. I, the
 solution,
 refluxed in an oil bath at 120°, 12 g. pure p-toluidine, 6864 15 g.
 anhydrous K2CO3, and 0.1 g. Cu powder added, and the mixture refluxed
 2-3 h at
 130°, diluted with H2O, boiled with charcoal, and filtered hot;
 acidification with dilute HCl gave a deep green precipitate which, after
 reprecipn.
 from NH3 with dilute HCl (Congo red), filtration, drying, and
 crystallization from
 glacial HOAc, gave light green rhombic plates (27 g., 95%).
 2-Iodo-7-methyl-9-chloroacridine (III): 15 g. II was refluxed with 40 cc.
 POCl3 on an oil bath at 120° 3-4 h, the excess POCl3 distilled off at
 reduced pressure, and ice-cold dilute ammonia added to the ice-cold
 solution to
 liberate the base, which was filtered, washed with H2O, and dried on a
 porous plate in a vacuum desiccator; crystallization from C6H6 gave
 golden-yellow
 needles, m. 151-2°, in quant. yield. 2-Iodo-7-methyl-9-
 aminoacridine (IV): To 1 g. III in 10 g. PhOH, heated to 70° in an
 oil bath, was rapidly added 1 g. well-powdered (NH4)2CO3 with constant
 stirring, the temperature raised to 120°, the solution heated for 0.5 h
 (during which effervescence ceased), cooled, and the HCl salt
 precipitated with
 Et2O and a few drops alc. HCl; recrystn. from absolute alc. gave
 prismatic
 plates, m. 330°, sparingly soluble in alc. and less soluble in H2O. The
 alc. solution exhibited greenish-yellow fluorescence. The base,
 precipitated with
 10% NaOH, and recrystd. from absolute alc. and Me2CO, gave yellow
 needles, m.
 291-2°, sparingly soluble in alc. and organic solvents.

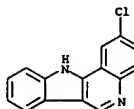
L7 ANSWER 267 OF 273 CAPLUS COPYRIGHT 2005 ACS ON STN (Continued)



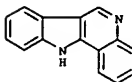
RN 855612-22-5 CAPLUS
 CN 11H-Indolo[3,2-c]quinoline, 2-chloro-11-(2-diethylaminoethyl)- (5CI) (CA INDEX NAME)



RN 855612-23-6 CAPLUS
 CN 11H-Indolo[3,2-c]quinoline, 2-chloro- (5CI) (CA INDEX NAME)



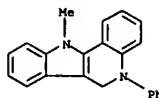
L7 ANSWER 268 OF 273 CAPLUS COPYRIGHT 2005 ACS ON STN (Continued)
 2-Iodo-7-methyl-9-(2-iodo-7-chloro-9-acridylamino)acridine (V): IV (1
 mol.) and 1 mol. 2-iodo-7,9-dichloroacridine in PhOH were heated 4 h. in
 a
 H2O bath, and Et2O added to ppt. the yellow powdery V; recrystn. from a
 large vol. of abs. alc. gave greenish-yellow needles, m. 348-9°,
 very sparingly sol. in all the usual solvents.
 2-Iodo-7-methyl-9-(2-iodo-7-
 ethoxy-9-acridylamino)acridine (VI), prepd. as V from 2-iodo-7-ethoxy-9-
 chloroacridine; HCl salt, greenish-yellow powder, bright yellow needles
 from abs. alc., m. 305°. 2-Iodo-7-methyl-9-(p-
 methoxyphenylamino)acridine (VII): III (1 g.) dissolved in 6 g. PhOH on a
 H2O bath and 0.4 g. p-anisidine were heated at 100° 4 h, cooled,
 dild. with Et2O, and the base washed with Et2O and Me2CO, and crystd.
 from
 glacial HOAc as slender yellow needles of the acetate, m. 290-1°;
 the base, liberated with hot 5% NaOH, yellow needles from abs. alc. and
 Me2CO, m. 210°. The condensation product of III with p-phenetidine
 (VIII) [HCl salt, m. 302°], p-toluidine (IX), m. 225° [HCl
 salt, m. 310-11°], 2-aminopyridine (X), m. 230-2° [HCl salt,
 m. 298°], 2-aminopyrimidine (XI), m. 265° [HCl salt, m.
 305-7°], and p-xylydine (XII), m. 254° [HCl salt, m.
 288-90°], were prepd. as VII.
 IT 239-09-8, 11H-Indolo[3,2-c]quinoline
 (and derivs.)
 RN 239-09-8 CAPLUS
 CN 11H-Indolo[3,2-c]quinoline (6CI, 7CI, 8CI, 9CI) (CA INDEX NAME)



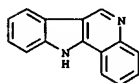
L7 ANSWER 269 OF 273 CAPLUS COPYRIGHT 2005 ACS ON STN
 AN 1950:20105 CAPLUS
 DN 44:20105
 OREF 44:3997a-1
 TI Structure and color in the indolo(3',2',3,4)quinoline and the 1,2-dihydroquinolino(3',2',3,4)quinoline series
 AU Mann, Frederick G.
 CS Univ. of Cambridge, UK
 SO Journal of the Chemical Society, Abstracts (1949) 2816-24
 CODEN: JCSAAZ; ISSN: 0590-9791
 DT Journal
 LA Unavailable
 OS CASREACT 44:20105
 GI For diagram(s), see printed CA Issue.
 AB cf. C.A. 43, 8351e. The phenylhydrazones of 4-keto-1-phenyl-1,2,3,4-tetrahydroquinoline (I) in the Fischer indole condensation yields the yellow 1-phenylpseudoindolo(3',2',3,4) quinoline (II), which on salt formation gives the colorless 1-phenylindolo(3',2',3,4)quinolinium cation (IIa). H sulfate of II, with 1 mol. H₂O, m. 284-90° (decomposition); H oxalate, with 1.5 mols. H₂O, m. 237-8° (decomposition); both salts become pale yellow in light; methiodide, with 1 mol. MeOH, yellowish buff, m. 286°; ethiodide, same color, m. 293° (decomposition); the significance of the color of these quaternary salts is not certain. I yields a phenylmethylhydrazone, orange-yellow, m. 102-2.5°, refluxed 5 h. with saturated EtOH-HCl, it yields 1-phenyl-1'-methyl-1,2-dihydroindolo(3',2',3,4)quinoline, m. 191°; it does not form a methiodide. The phenylethylhydrazone of I, yellow, m. 95°, could not be cyclized to an indole. The diphenylhydrazone of I, yellow, m. 160°, also does not yield an indole. Isatin (3 g.) and 4 g. I, added in turn to 3.6 g. KOH in 4 cc. H₂O and 20 cc. EtOH and refluxed 15 h., give 1-phenyl-1,2-dihydroquinolino(3',2',3,4)-quinoline-4'-carboxylic acid (III), deep red, m. 210° (decomposition), undergoes slow decomposition on exposure to light; K salt, yellow; Me ester, with 1 mol. MeOH, bright yellow, m. 139°, results from the K salt and MeI; III does not react with MeI (refluxed 6 h.). III, heated cautiously at 0.1 mm., gives 1-phenyl-1,2-dihydroquinolino(3',2',3,4)-quinoline (IV), bright yellow, m. 139-41°; it decompose slowly in bright light and turns a dull yellowish brown; in sealed tubes in the dark, the color is unchanged but the m.p. varies considerably. IV forms a HCl salt, garnet-red, m. 280° (decomposition). IV does not form a quaternary salt; MeI and MeOH, heated 8 h. at 80°, appear to give a HI salt, deep red, decompose 300-25°. IV, reduced with Na in EtOH or over Pt at 75-85°/50 atmospheric (6 h.), gives 1-Ph - 1,1',2,2',3',4' - hexahydroquinolino(3',2',3,4) - quinoline (V), m. 117°; HCl salt, decompose over an indefinite range. IV, oxidized with air 4 h. at 100-20° and 4 h. at 175°, gives 2-keto-1-phenyl-1,2-dihydroquinolino(3',2',3,4)quinoline (VI), cream, m. 259°; VI results in 0.35-g. yield from 0.5 g. IV and KMnO₄ in Me₂CO at room temperature but not with H₂O₂ in Me₂CO; HCl salt, bright orange-yellow, m. 257-8° (dissociation to IV); picrate, bright yellow, m. 223-5°; nitrate, bright yellow, m. 238-50°. VI does not form a methiodide, an acetate, or 2,4-dinitrophenylhydrazone. VI is not reduced by Na in boiling EtOH; hydrogenated over Pt at 100°/75 atmospheric (6 h.), V yields

L7 ANSWER 270 OF 273 CAPLUS COPYRIGHT 2005 ACS ON STN
 AN 1937:25008 CAPLUS
 DN 31:25008
 OREF 31:3483a-1,3484a-d
 TI Benzoylated derivatives of indigo. IV
 AU de Diesbach, Henri; Moser, Edouard
 SO Helvetica Chimica Acta (1937), 20, 132-41
 CODEN: HCACAV; ISSN: 0018-019X
 DT Journal
 LA Unavailable
 GI For diagram(s), see printed CA Issue.
 AB cf. C. A. 30, 1401.5. On heating with 15% NaOH, Indigo Yellow 3 G Ciba (I) (Ciba yellow) is transformed into a dihydrate which can be converted with Me₂SO₄ into a di-Me and a mono-Me derivative. The latter, by loss of CO₂, gives a new decarboxylated product (cf. Hope and Richter, C. A. 27, 506). If the formulas proposed for I and its transformation products are correct these substances can be considered as derivs. of 2-phenyl-(4'-oxo-1',4'-dihydro-2',3'-quinolino)-3,4-quinoline (II). A mixture of 30 g. o-anilidoacetophenone (cf. Bischler, Ber. 25, 2865(1892)), 19 g. isatin and 140 g. KOH in 200 cc. alc. and 200 cc. H₂O was heated for 7 h. on the steam bath. The salt separating from the cold reaction mixture was dissolved in boiling H₂O and, on addition of mineral acid, gave yellow crystals (from alc.) of 2-phenyl-3-anilidoquinoline-4-carboxylic acid (III), m. 250° (Me ester, m. 142°), converted by heating to fusion into 2-phenyl-3-anilidoquinoline, m. 137°. A suspension of 10 g. III in 100 cc. of 70% H₂SO₄ was heated on the steam bath for 30 min. and the oily product was chilled and the red precipitate was filtered off and washed. Crystallization from toluene gave yellow II, C₂₂H₁₄N₂O, m. 266°, whose NH group could neither be benzoylated, acetylated nor methylated. The dropwise addition of a mixture of 20 g. BrCH₂COBr and 10.5 g. m-xylene into a suspension of 28 g. of powdered AlCl₃ in 150 cc. CS₂ produced a vigorous reaction. After standing for 3 h. the reaction mixture was decomposed with ice and the CS₂ solution was dried. Evaporation of the solvent and recrystn. of the product from Et₂O yielded white tablets of 2,4-dimethyl-o-bromacetophenone, m. 41°, which condensed with a slight excess of freshly distilled PhNH₂ to yellow needles (from alc.) of 2,4-dimethyl-o-anilidoacetophenone (IV), m. 86°. Condensation of 13 g. IV with 8.5 g. isatin, 60 g. KOH in 100 cc. alc. and 100 cc. H₂O by heating for 6 h. and proceeding as described above, produced yellow crystals of 2-(2',4'-dimethylphenyl)-3-anilidoquinoline-4-carboxylic acid (V), m. 245° (Me ester, m. 102°), decarboxylated to brown needles of 2-(2',4'-dimethylphenyl)-3-anilidoquinoline, m. 115°. Internal condensation of V, by heating in 70% H₂SO₄ for 30 min. on the steam bath and crystallization of the product from toluene formed yellow crystals of 2-(2',4'-dimethylphenyl)-(4'-oxo-1',4'-dihydro-2',3'-quinolino)-3,4-quinoline (VI), m. 250°. Futile efforts were made to cause a ring closure between the NH and neighboring Me group. The formation of a new ring in this position would lead to derivs. with a constitution analogous to that of I. The condensation of 23 g. o-(4'-methylaniido)acetophenone with 15 g. isatin in the presence of 70 g. KOH in 100 cc. alc. and 100 cc. H₂O and recrystn. of the product from PhNO₂ yielded yellow crystals of the acid, C₂₃H₁₈N₂O₂, m. 249° (Me ester,

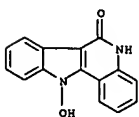
L7 ANSWER 269 OF 273 CAPLUS COPYRIGHT 2005 ACS ON STN (Continued)
 2-keto-1-phenyl-1',2',4'-tetrahydroquinolino(3',2',3,4)quinoline (VII), m. 238-57°; it crystallizes with 1 mol. EtOH with the same indefinite m.p. IR spectra are given for IV, VI and its HCl salt, V, and VII. The reasons for assigning the various structures are discussed.
 IT 858193-29-0, 5H-Indolo[3,2-c]quinoline, 6,11-dihydro-11-methyl-5-phenyl- (preparation of)
 RN 858193-29-0 CAPLUS
 CN 5H-Indolo[3,2-c]quinoline, 6,11-dihydro-11-methyl-5-phenyl- (5CI) (CA INDEX NAME)



IT 239-09-0, 11H-Indolo[3,2-c]quinoline (salts)
 RN 239-09-8 CAPLUS
 CN 11H-Indolo[3,2-c]quinoline (6CI, 7CI, 8CI, 9CI) (CA INDEX NAME)

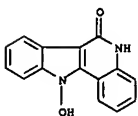


L7 ANSWER 270 OF 273 CAPLUS COPYRIGHT 2005 ACS ON STN (Continued)
 m. 163°), decarboxylated to 2-phenyl-3-(4'-methylaniido)quinoline, m. 132°, and internally condensed by hot 70% H₂SO₄ to 2-phenyl-(4'-oxo-1',4'-dihydro-2',3'-(6'-methylquinolino)-3,4-quinoline (VII), C₂₃H₁₆N₂O, m. 256°. Condensation of 15 g. o-(2'-methylaniido)acetophenone with 10 g. isatin gave yellow cryst. 2-phenyl-3-(2'-methylaniido)quinoline-4-carboxylic acid, m. 252° (Me ester, m. 138°), decarboxylated to 2-phenyl-3-(2'-methylaniido)quinoline, m. 93-5°, and condensed to cryst. 2-phenyl-(4'-oxo-1',4'-dihydro-2',3'-(8'-methylquinolino)-3,4-quinoline, C₂₃H₁₆N₂O, m. 317-20°. Attempts to synthesize the Hope and Richter product were unsuccessful. The methylation of the NH group of II or III failed and o-(N-methylaniido)acetophenone could not be condensed with isatin. The synthesis of the hydrate of I by the condensation of o-anilidoacetophenone-2-carboxylic acid with isatin could not be effected since the condensation of o-bromacetophenone-2-carboxylic acid with PhNH₂ gave 1,4-diketo-2-phenyltetrahydroisoquinoline, m. 149°, which is stable in the presence of strong alkali and does not condense with isatin. Similarly condensations with 1,3-diketo-2-anilidohydriene, C₁₅H₁₁N₂O, m. 215° (acid, C₁₅H₁₃N₂O₃, m. 137°), failed. Although the proof of the structure of I could not be established by synthesis the degradn. of II, VI and VII by caustic fusion showed that the elimination of 4,3-(N-hydroxyindolo)-2-hydroxyquinoline (VIII) is a phenomenon common to all the members of this group, including I. The main degradn. product of VII is 4,3-(N-hydroxyindolo)-6-methyl-2-hydroxyquinoline (IX), C₁₆H₁₂N₂O₂, converted by heating with PCl₅ in PhNO₂ into 4,3-(N-chloroindolo)-6-methyl-2-chloroquinoline, C₁₆H₁₀N₂Cl₂, m. 223°, which condenses with PhNH₂ to 4,3-(N-anilidoindolo)-6-methyl-2-chloroquinoline, C₂₂H₁₆N₃Cl, m. 214°, and, on further heating with PhNH₂, to 4,3-(N-anilidoindolo)-6-methyl-2-anilidoquinoline, C₂₈H₂₂N₄, m. 256°. The oxidn. of a suspension of 10 g. IX in 3 l. H₂O at 90° by the addn. of 50 g. KMnO₄ and 22 g. Hg(OAc)₂ gave 5-methyl-2-aminobenzoic acid, m. 175°, and an HCl-insol. residue, m. 256°, which is probably 5-methyl-2-(N-oxalylamino)benzoic acid, transformed by boiling alkali into the corresponding amino acid. VIII from the alk. degradn. of I similarly gives appreciable quantities of oxalanthranilic acid.
 IT 56503-61-8, 11-Indolo[3,2-c]quinoline-6,11-diol (preparation of)
 RN 56503-61-8 CAPLUS
 CN 6H-Indolo[3,2-c]quinolin-6-one, 5,11-dihydro-11-hydroxy- (9CI) (CA INDEX NAME)

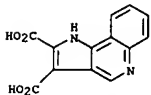


L7 ANSWER 271 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)
 AN 1934:19660 CAPLUS
 DN 28:19660
 GREF 28:2355a-1,2356a-b
 TI Benzoyl derivatives of indigo. II
 AU de Diesbach, Henri; de Bie, Edouard; Rubli, Fritz
 SO Helvetica Chimica Acta (1934), 17, 113-28
 CODEN: HCACAV; ISSN: 0018-019X
 DT Journal
 LA Unavailable
 AB cf. C. A. 27, 2149. The melt from the alkaline fusion of 20 g. of Ciba yellow (I) in 100 g. NaOH at 270-320° in a Cu or Ni crucible was poured onto a metal plate. The cold mass from 5 such operations was powdered and digested with 500 cc. of cold H₂O. The residue was extracted with 2 l. of cold H₂O, centrifuged and washed (solution II). The insol. portion was digested with dilute HCl, yielding a mother liquor (III) and 52 g. of an acid-insol. residue (IV). On acidification II precipitated 22 g. BrOH, 8 g. C₆H₄(CO₂H)₂ and 4 g. of a yellow product (V). Neutralization of III with excess NH₄OH gave 11 g. of a substance (VI). There were also present as by-products 0.5 g. of o-H₂NC₆H₄CO₂H (VII) and 0.5 g. of an unknown alkali-soluble base. VI, C₁₅H₁₀N₂, m. 332° (mononitro derivative, C₁₅H₉N₃O₂), is probably a 3,4-indoloquinoline since on oxidation with CrO₃ in glacial AcOH it gives 3,4-pyrroloquinoline-2',3'-dicarboxylic acid, C₁₃H₈N₂O₄, m. 325° (decomposition), decarboxylated by sublimation in vacuo at 325° to 3,4-pyrroloquinoline (VIII), C₁₁H₈N₂, m. 293-4°. Oxidation of VIII by KMnO₄ gave a good yield of oxalylanthranilic acid, transformed by alkaline saponification into VII, proving that all the above derivs. have a quinoline nucleus in which the benzene ring is unsubstituted. Oxidation of VIII with HNO₃ (d. 1.4) yielded 4-hydroxy-3-quinolinecarboxylic acid and thus the junction of the C atoms between the quinolinic and pyrrole nuclei is in position 3. The main product IV, 3,4-(N-hydroxyindolo)-2-hydroxyquinoline, C₁₅H₁₀N₂O₂, m. above 430°, dinitro derivative, C₁₅H₈N₄O₆, was oxidized by KMnO₄ to oxalylanthranilic acid and on treatment with PCl₅ in PhNO₂ yielded 3,4-(N-chloroindolo)-2-chloroquinoline, transformed by heating with a little PhNH₂ in benzene to 3,4-(N-anilinoindolo)-2-chloroquinoline, C₂₁H₁₄N₃Cl, m. 195°, and on boiling in PhNH₂ to 3,4-(N-anilinoindolo)-2-anilinoquinoline, C₂₇H₂₀N₄, m. 284°. The verity of these formulations is based on the well-established structure of VIII. The different results obtained by Hope and Richter (C. A. 27, 506) are attributed to the use of a steel tube in making the fusion, provoking a reduction of I to Höchst yellow which on alkaline cleavage gives VII. The results of H. and R. are valuable since they demonstrate the smallness of the differences between the various products of the reaction of BrCl on indigo. Höchst yellow R (IX), m. 354°, prepared by the action of cold H₂SO₄ on the Dessoulay compound was fused at 255° with NaOH. The cold mass was dissolved in H₂O, filtered and acidulated with HCl.

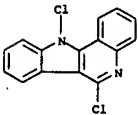
L7 ANSWER 271 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)
 RN 56503-61-8 CAPLUS
 CN 6H-Indolo[3,2-c]quinolin-6-one, 5,11-dihydro-11-hydroxy- (9CI) (CA INDEX NAME)



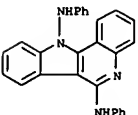
RN 856097-71-7 CAPLUS
 CN 1-Pyrrolo[3,2-c]quinoline-2,3-dicarboxylic acid (3CI) (CA INDEX NAME)



RN 859191-94-9 CAPLUS
 CN INDEX NAME NOT YET ASSIGNED



RN 859772-47-7 CAPLUS
 CN 11-Indolo[3,2-c]quinoline, 6,11-dianilino- (3CI) (CA INDEX NAME)



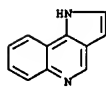
RN 859772-52-4 CAPLUS
 CN 11-Indolo[3,2-c]quinoline, 11-anilino-6-chloro- (3CI) (CA INDEX NAME)

L7 ANSWER 271 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)
 cryst. HCl salt in H₂O was neutralized with (NH₄)₂CO₃ and the base on crystn. from alc. gave the 3-hydroxy-2-phenylquinoline-2'-carboxylic acid lactone (X), C₁₆H₉N₂O₂, m. 248°, which on methylation with Me₂SO₄ in NaOH gave Me 3-hydroxy-2-phenylquinoline-2'-carboxylate, C₁₇H₁₁N₂O₃, m. 189°. Two varieties of IX are known and the interruption of the alk. fusion at 140° gives a 3rd form in which the OH group has migrated from position 4 to position 3 in the quinoline nucleus. Alk. fusion of Höchst yellow U (XI), m. 283-4°, prep'd. by heating IX in concd. H₂SO₄ on the steam bath, yields 1 mol. of VII and 1 mol. of X. Thus XI differs entirely from I although they have almost identical reactions. Since on alk. fusion XI gives VII and I yields VI it is possible to det. the proportion of a mixt. of the 2 dyestuffs. The above facts permit the provisional establishment of formulas for the different derivs. obtained by the action of BrCl on indigo. The monobenzoylindigo formed rearranges in acid soln. to generate with the indoxyllic median C atom a new hexagonal nucleus. The nuclei of the quinoline deriv. thus formed are open and at this stage according to the conditions of the expt., the H atom attached to the N atom may be benzyloated, eliminated

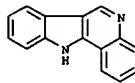
or may migrate. Structural formulas are given for I, its dihydrate and vat, for IX, XI and its vat and for the Dessoulay comp'd. The formation of VI and IV by alk. fusion of I is explained by a mechanism consisting of an internal condensation followed by elimination of H₂O or by oxidation, and the relation between I with its characteristic double bond and comp'ds. of the Höchst yellow type is demonstrated.

IT 233-38-5, 1-Pyrrolo[3,2-c]quinoline 239-09-8, 11-Indolo[3,2-c]quinoline 56503-61-8, 11-Indolo[3,2-c]quinoline-6,11-diol 856097-71-7, 1-Pyrrolo[3,2-c]quinoline-2,3-dicarboxylic acid 859191-94-9, 11-Indolo[3,2-c]quinoline, 6,11-dichloro- 859772-47-7, 11-Indolo[3,2-c]quinoline, 6,11-dianilino- 859772-52-4, 11-Indolo[3,2-c]quinoline, 11-anilino-6-chloro- (preparation of)

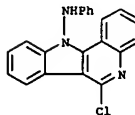
RN 233-38-5 CAPLUS
 CN 1H-Pyrrolo[3,2-c]quinoline (8CI, 9CI) (CA INDEX NAME)



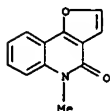
RN 239-09-8 CAPLUS
 CN 11H-Indolo[3,2-c]quinoline (6CI, 7CI, 8CI, 9CI) (CA INDEX NAME)



L7 ANSWER 271 OF 273 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



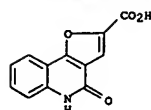
L7 ANSWER 272 OF 273 CAPLUS COPYRIGHT 2005 ACS ON STN
 AN 1932:20845 CAPLUS
 DN 26:20845
 OREF 26:2196a-e
 TI Synthesis of a compound isomeric with dictamine
 AU Asahina, Yashuko; Inubuse, Mototaro
 SO Ber. (1932), 65B, 61-3
 OT Journal
 LA Unavailable
 GI For diagram(s), see printed CA Issue.
 AB Dictamnol (I), m. 260°, obtained in 1.2-1.3 g. yield from 2 g. dictamnol (II) with dilute O₃ in CHCl₃, is demethylated by HBr-AcOH at 120-30° or by 10% alc. KOH on the water bath to nordictamnol (III) (also obtained by slowly adding CHCl₃ to 2,4-dihydroxyquinoline in 15% NaOH on the water bath), which does not m. 350°, gives a blood-red color in alc. with a trace of FeCl₃ and shows violet fluorescence in alkalies (phenylhydrazones, yellow, m. 235°). With NCCH₂CO₂H in warm 10% KOH, III gives nordictamnolcyanoacetic acid, yellow, m. 275° (decomposition), hydrolyzed by concentrated H₂SO₄, with a coumarin-like ring closure, to a compound (IV, R = CO₂H), light yellow needles with 1 H₂O, m. 305-10° (decomposition), which on being cautiously heated over a free flame (not more than 0.1 g. at a time) loses CO₂ to form a substance IV, R = H, m. 335°, which gives no color with alc. FeCl₃ and forms with Br-AcOH a Br derivative (IV, R = Br), yellowish, gradually decomposing above 300°. This with 10% KOH on the water bath gives a coumarilic acid-like compound (V), m. 310° (decomposition), easily soluble in Na₂CO₃, showing strong violet fluorescence in alkalies. V when heated undergoes deep-seated decomposition, but its N-Me derivative (prepared with Me₂SO₄ and KOH in MeOH) on dry distillation gives an isomer of I, pseudodictamnol (VI), m. 225°, insol. in alkalies.
 IT 67735-57-3, Furo[3,2-c]quinolin-4(5H)-one, 5-methyl-
 108993-85-7, Furo[3,2-c]quinoline-2-carboxylic acid, 4-hydroxy- (preparation of)
 RN 67735-57-3 CAPLUS
 CN Furo[3,2-c]quinolin-4(5H)-one, 5-methyl- (6CI, 9CI) (CA INDEX NAME)



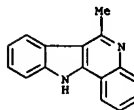
RN 108993-85-7 CAPLUS
 CN Furo[3,2-c]quinoline-2-carboxylic acid, 4,5-dihydro-4-oxo- (6CI) (CA INDEX NAME)

L7 ANSWER 273 OF 273 CAPLUS COPYRIGHT 2005 ACS ON STN
 AN 1930:49084 CAPLUS
 DN 24:49084
 OREF 24:5299h-1,5300a-d
 TI Syntheses in the indole series, IV. Derivatives of 2,3-benzo-y-carboline
 AU Kermack, Wm. O.; Smith, James F.
 SO Journal of the Chemical Society, Abstracts (1930) 1999-2010
 CODEN: JCSAAZ; ISSN: 0590-9791
 DT Journal
 LA Unavailable
 AB cf. C. A. 22, 2355, 4-Chloro-2-methylquinoline (10 g.) and 6 g. o-C₆H₄(NH₂)₂, heated at 140° and 2-3 mm. for 2 hrs. give 13 g. of the di-HCl salt, m. 301° of 4-o-aminophenylamino-2-methylquinoline (I), m. 220°; concentrated H₂SO₄ gives a solution exhibiting a faint greenish fluorescence. I in 3% HCl and NaNO₂ give the HCl salt, m. 210°, of 4-(benzotriazolyl-3')-2-methylquinoline, m. 149°; the cold concentrated H₂SO₄ solution exhibits a light blue fluorescence in the arc light; heated in sirupy H₂PO₄ until the evolution of N ceases, there results 5-methyl-2,3-benzo-y-carboline (II), light brown, m. 298°; in neutral and acid solution it exhibits a strong bluish violet fluorescence; concentrated H₂SO₄ gives a bluish color on heating. 4-Chloro-6-methoxy-2-methylquinoline and o-C₆H₄(NH₂)₂, heated at 140° and 12 mm. for 1-2 hrs., give 90% of the mono-HCl salt, pale yellow, m. 294°, crystallizing with 2 mols. H₂O, of 4-o-aminophenylamino-6-methoxy-2-methylquinoline, pink, m. 188°; the yellow HNO₃ solution becomes crimson on heating. NaNO₂ in 3% HCl gives the HCl salt, m. 221°, of 4-(benzotriazolyl-3')-6-methoxy-2-methylquinoline, pink, m. 144°; H₃PO₄ gives 15-methoxy-5-methyl-2,3-benzo-y-carboline, dark brown, crystallizing with 1 mol. MeOH, m. 236°; cold concentrated H₂SO₄ exhibits a violet fluorescence, which darkens to reddish brown on warming. p-Anisidine and AcCHMeCO₂Et, warmed on the H₂O bath, give a semi-solid, dark brown mass of the condensation product, which, heated to 250°, gives 4-hydroxy-6-methoxy-2,3-dimethylquinoline, crystallizing with 1 mol. H₂O, m. 294°; POCl₃ gives the 4-Cl derivative, m. 111°; concentrated H₂SO₄ and HNO₂ give solns. with a very strong blue fluorescence in the arc light but undergo no color change on warming. Condensation with o-C₆H₄(NH₂)₂ gives the HCl salt, bronze-colored, m. 125° (decomposition) (from 5% HCl, the di-HCl salt, green, m. 284° (decomposition), sepa.) of 4-o-aminophenylamino-6-methoxy-2,3-dimethylquinoline, yellow-brown, m. 193°; NaNO₂ in 3% HCl converts this into 4-(benzotriazolyl-3')-6-methoxy-2,3-dimethylquinoline, m. 201°; attempts to obtain a crystalline base from this by heating with H₃PO₄ failed. 4-Chloro-2-methylquinoline and PhMeNH₂, heated at 160-80° for 2 hrs., give 4-(β-phenyl-β-methylhydrazino)-2-methylquinoline, yellow, m. 237°; the HCl salt, yellow, m. 172°; POCl₃ had no action on this compound, while ZnCl₂ at 140-80° caused considerable decomposition but gave no benzo-y-carboline. o-AcNH₂C₆H₄Ac and PhMeNH₂ in 50% AcOH, heated on the H₂O bath for 30 min., give o-acetamidacetophenone phenylmethylhydrazone, yellow, m. 131-2°, which with POCl₃ in PhMe yields 1,5-dimethyl-2,3-benzo-y-carboline (III), yellow, m. 173-4°. II yields a methosulfate, m. 277° (decomposition); an aqueous solution, made alkaline with NH₄OH, gives 4,5-dimethyl-2,3-benzo-y-carboline, crystallizing with 1 mol. H₂O, m. 262°, whose methosulfate (IV) m. 292°. III yields a methosulfate which is identical with IV.

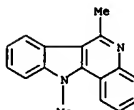
L7 ANSWER 272 OF 273 CAPLUS COPYRIGHT 2005 ACS ON STN (Continued)



L7 ANSWER 273 OF 273 CAPLUS COPYRIGHT 2005 ACS ON STN (Continued)
 IT 4295-28-7, 11-Indolo[3,2-c]quinoline, 6-methyl-
 109697-99-6, 11-Indolo[3,2-c]quinoline, 6,11-dimethyl-
 859191-86-9, 11-Indolo[3,2-c]quinoline, 2-methoxy-6-methyl- (preparation of)
 RN 4295-28-7 CAPLUS
 CN 11H-Indolo[3,2-c]quinoline, 6-methyl- (7CI, 8CI, 9CI) (CA INDEX NAME)



RN 109697-99-6 CAPLUS
 CN 11H-Indolo[3,2-c]quinoline, 6,11-dimethyl- (6CI) (CA INDEX NAME)



RN 859191-86-9 CAPLUS
 CN INDEX NAME NOT YET ASSIGNED

